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Under the Canadian Constituion Act, 1982, the term Aboriginal Peoples refers to First Nations, Inuit, and Métis people living in Canada. However, common use of the term is not always inclusive of all three distinct people and much of the available research only focuses on particular segments of the Aboriginal population. NAHO makes every effort to ensure the term is used appropriately.

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Journal of Aboriginal Health
National Aboriginal Health Organization
56 Sparks St., Suite 400, Ottawa, ON K1P 5A9
Phone: (613) 237-9462 Toll free: 1-877-602-4445
Fax: (613) 237-1810
E-mail: journal@naho.ca, Web site: www.naho.ca

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Cover Image Both Aboriginal views and population health frameworks recognize that well-being is the result of a complex interplay between environment and person. The early years of a child's life are important across many domains of development. This issue of the <i>Journal of Aboriginal Health</i>

Inside Mother Earth's Womb: Jennifer Webegijig participated in a teaching at a community health conference.

focuses on population health from an Aboriginal perspective.

Photograph submitted by Linda Peltier

Journal of Aboriginal Health

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TRANSLATION
Jean-François Ceillier

Editorial

Population Health: Risk and Resistance

hile no single Aboriginal framework on health can be stated, Aboriginal world views and languages hold the key to understanding a few culturally sound ideas. Most North American indigenous cultures believe all creation is related in space and time. Many languages do not separate the animate and inanimate supporting a world view where the universe is alive, is infused (or filled) with spirit, and requires a relationship with moral content.¹

 \dots health is conceived less as a personal matter \dots than as a harmonious order in which the person is integrated in an encompassing social, temporal, spiritual and non-empirical environment \dots^2

The natural result of respectful balance and harmony in the universe is health or the good life. In the current discussion on population health, position in the social hierarchy-participation in a localized and sustainable economy-personal control, relationship, belonging, early life experience, social organization, coping styles, resilience, stress, genetics, service access, and spirituality, together with purity and cultural significance of food and housing are a few of the important determinants. Both Aboriginal views and population health frameworks recognize that well-being is the result of a complex interplay between environment and person. Both agree that a variety of players not previously thought part of the health web are part of the health solution. On first glance, it would seem that everything old is new again. However, there are key areas where subtle differences between western notions of human need and Aboriginal ideas (traditional and contemporary) exist. From an Aboriginal perspective, human needs cannot be prioritized. In other words, spiritual expression is as essential as water. However, soulful dimensions are only ever incidentally recognized within more fundamentally emotional or mental factors in the health determinants discussion. Secondly, as a natural response to assimilation, culture is important in the restoration of balance and harmony from a contemporary Aboriginal perspective. After all, culture is what influences all decisions that create ways of life.

Colleen Dell, Debra Dell, and Carol Hopkins illustrate the power of culture and spirituality through the use of traditional medicine and ceremony. In Resiliency and Holistic Inhalant Abuse Treatment, the authors provide further evidence that culture and spirituality may be more effective as a framework for treatment than conventional approaches. The authors stress that family and community are central to individual ability to reclaim a rightful place of balance and harmony. This is a repeated theme in this issue.

The importance of relationships to family and community extends to include the history of relationships between Aboriginal communities and Canadians more generally in Terry Mitchell and Dawn Maracle's paper Healing the Generations: Post-Traumatic Stress and the Health Status of Aboriginal Populations in Canada. The authors make it clear that once colonial history is understood, then a social context is created for what have historically and wrongfully been considered cultural deficits and character flaws. They urge more balance between services that focus on the physical and other dimensions of well-being. These include cultural, mental, and social aspects. The authors propose the use of a post-traumatic stress response framework as a way of addressing health differences between Aboriginal people and the general Canadian population more sensitively and effectively.

In their paper entitled Social Capital as a Health Determinant in First Nations: An Exploratory Study in Three Communities, Javier Mignone and John O'Neil advance the discussion with a detailed examination of, and a proposed methodology to, measuring social capital in the community. The authors advocate for the identification of communities as objects of policy. This would recognize the social context within the community and with external partners is an important health determinant.

In Early Childhood Care and Development Program as Hook and Hub for Inter-sectoral Service Delivery in First Nations Communities, Jessica Ball offers several illustrations of how equal and effective partnerships with external institutions that respect and recognize Aboriginal moral authority can help establish local services. The case studies demonstrate how empowering communities to improve the quality of young lives can draw others



into action, and serve as a centre for community social investment. They also act as a catalyst to expand service access while dramatically affecting several realms of early development that set the stage for improved life outcomes.

Maria Burglehaus and Monica Stokl also address the effectiveness of empowerment and early development in their paper Sheway: Supporting Choice and Self-Determination. Opportunities for learning in an environment that is accepting and safe, where self-responsibility and choice are reinforced are the most promising ways to engage women with multiple needs in prenatal care. Women in Vancouver's downtown eastside clearly welcome Sheway's approach, which has created conditions for improved birth weights for their infants.

Finally, an issue dedicated to examining health as a complex interplay between environment and person would be incomplete without some discussion of land relationship. Willie Ermine, Ralph Nilson, David Sauchyn, Ernest Sauve, and Robin Smith discuss the value of Elders' perspectives on climate change as well as the use of traditional ecological knowledge in

land and resource management plans. The authors discuss a method of working with Elders as stewards toward an improved understanding of human relationship to the natural world. In their paper Isi Askiwan—The State of the Land: Summary of the Prince Albert Grand Council Elder's Forum on Climate Change, the authors share how the Elders recognize changes in water quality and quantity, the availability of traditional medicines, and a disrupted relationship to the land that they claim is leading to a depersonalized universe. The Elders stress personal and societal responsibility to improve the situation and the authors support the use of traditional ecological knowledge in land and resource management plans.

The disruption between Aboriginal people and the lands to which they belong is perhaps no more evident than in dietary options and physical activity levels. In her paper Overweight in Aboriginal Children: Prevalence, Implications, and Solutions, Noreen Willows argues that effective interventions to prevent overweight and obesity must take into consideration behavioural patterns and environmental barriers to improved diet and lifestyle. These include decreased traditional food harvesting, local belief systems, and economies.

Regrettably, further discussion about the implications of economy–particularly globalization–and the impact of environmental contamination and poor housing on Aboriginal health are missing from this issue of the *Journal of Aboriginal Health*. Nonetheless, with its focus on the reduction of social inequities, environmental integrity, and self-determination, the population health approach has particular relevance for Aboriginal people in Canada. When self-responsibility as well as community-based and internally focussed accountability mechanisms are strengthened, the soul-destroying impacts of colonialism can be effectively unwound. Great efforts were made to ensure that papers with a community voice and perspectives were secured so the policy implications of this work would have clear and practical relevance.

In the end, this issue of the *Journal of Aboriginal Health* could not have been realized without the tireless support of Virginia St-Denis of the National Aboriginal Health Organization. I am grateful for her careful attention to detail and consistently positive outlook. I would also like to express my sincere thanks to the National Aboriginal Health Organization for inviting me to be the Guest Editor for the second issue of the *Journal of Aboriginal Health*. It is with pleasure and honour that I offer this stimulating collection of ideas.

Kim Scott Kishk Anaquot Health Research P.O. Box 51 165 Pitobeg Mikan Maniwaki, QC J9E 3B1 kscott@rogers.com

ENDNOTES

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- 2. I. Ootoova, T.Q. Atagutsiak, T. Ijjangiaq, J. Pitseolak, Aalasi Joamie, Akisu Joamie, and M. Papatsie, *Interviewing Inuit Elders: Perspectives on Traditional Health* (Arviat, Nunavut: Nunavut Artic College, 2001).

Resiliency and Holistic Inhalant Abuse Treatment

Colleen Anne Dell, PhD,

Department of Sociology and Anthropology, Carleton University, and Canadian Centre on Substance Abuse, Debra E. Dell, BA,

Co-ordinator Youth Solvent Addiction Committee, and Carol Hopkins, MSW, Executive Director Nimkee NupiGawagan Healing Centre

Abstract

In Canada, a major and innovative national response to inhalant abuse among First Nations youth has been the establishment of residential treatment centres through the federally funded National Native Youth Solvent Addiction program (NNYSA). This paper focuses on the role of a holistic conception of resiliency in inhalant abuse treatment in the NNYSA program. A blending of policy and practice issues and their contribution to the health status of First Nations youth inhalant abusers guide the paper's discussion of resiliency and its fundamental role in NNYSA's traditional Native teachings program. A holistic conception of resiliency is viewed as a key contributor to the program's achievements to date. The focus on resiliency has been identified in assisting youth in uncovering their inner spirit and strengthening their spirit by drawing on available community resources. Data and case illustrations from two NNYSA treatment centres—White Buffalo Youth Inhalant Treatment Centre (Prince Albert, Sask.) and Nimkee NupiGawagan Healing Centre (Muncey, Ont.)—are presented. The paper also offers NNYSA policy solutions that have been guided by a holistic concept of resiliency and account for the intersecting roles of culture, spirituality, and community in creating and maintaining the health of First Nations youth solvent abusers. The paper concludes with suggestions for future research.

Key Words

Resiliency, inhalant abuse, treatment, National Native Youth Solvent Addiction Committee

INTRODUCTION

The use and abuse of inhalants among youth is an international concern with serious health, social, economic, and spiritual consequences. Among 40 countries reporting lifetime use prevalence during the 1990s, 16 reported rates of less than five per cent, 15 reported rates of between five and 10 per cent, and 10 reported rates between 10 and 20 per cent. Rates in poorer communities and among Aboriginal Peoples were reported to be much higher. For example, in Sao Paul, Brazil, nearly 24 per cent of nine to 18 year olds living in poverty had tried inhalants. Studies of First Nations communities in Canada and the United States have shown that, in some communities, up to 60 per cent of youth report use of inhalants. ¹

National and local responses to inhalant abuse are wide ranging, but in general focus on community in-

terventions, youth and retailer education, and treatment for chronic users. In Canada, one major national response to inhalant abuse among First Nations youth has been the establishment of residential treatment centres through the federally funded National Native Youth Solvent Addiction (NNYSA) program. Residential treatment for inhalant abuse is a relatively new concept, so there has been little research to inform policy and practice.

This paper focuses on the role of resiliency in holistic inhalant abuse treatment in the NNYSA program. A blending of policy and practice issues and their contribution to the health status of First Nations youth inhalant abusers guide the discussion. A holistic definition of resiliency is provided before the NNYSA program is outlined. This is followed with an examination of the underlying element of the traditional Na-

tive teachings program that is identified as the fundamental contributor to its achievements to date. Its foundation within a holistic conception of resiliency assists youth in uncovering their inner spirit and strengthens their spirit by drawing on available community resources. Data and case illustrations from two NNYSA treatment centres-White Buffalo Youth Inhalant Treatment Centre (WBYITC) and Nimkee NupiGawagan Healing Centre (NNHC)-are presented. (See Photographs 1 and 2.) Next, NNYSA policy solutions are offered. They have been guided by the holistic concept of resiliency, accounting for and intersecting the roles of culture, spirituality and community in creating and maintaining the health of First Nations youth solvent abusers. The paper concludes with suggestions for future research.

RESILIENCY DEFINED

The concept of resiliency is based in psychological and human development theory.² A common definition is the extent to which someone can recover from adversity.³ A resilient person is often compared to a rubber band. They have the ability to bounce back in spite of significant stress. More recently, the term has been used to describe an individual's ability to manage or cope with significant adversity or stress in effective ways. The individual's coping strategies are potential contributors to an increased ability to respond positively to future adversity. Resiliency is viewed here in a holistic way, consisting of a balance between the ability to cope with stress and adversity (recognizing the consequent creation of a skill set of positive coping strategies) and the availability of community support. (See Figure 1.)

Two dynamics are associated with the concept of resiliency: risk and shield.4 Risk dynamics pertain to an individual living in a context of stressful events. To illustrate, documented risk dynamics for clients at the WBYITC and NNHC include parental alcoholism, a range of forms of abuse, multiple losses, and lack of connection to schools or other support networks. Shield dynamics, commonly referred to in the literature as strengths or protectors, are individuals' personal skills, traits, spiritual connections and practices, and community supports. Shield dynamics are formed in two ways-inherent internal spirit of the individual and external community support and their development as a consequence of adversity. Shield dynamics provide a buffer as well as a pool of resources to effectively deal with strain. Note that both risk and shield dynamics are comprised of individual and community components. Also, both risk and shield factors

Photograph 1



White Buffalo Youth Inhalant Treatment Centre

Photograph 2



Nimkee NupiGawagan Healing Centre

are genuinely dynamic in nature. They can change over time.

Key to this holistic definition of resiliency is the concept of spirit. Traditional Native world view highlights one's spirit as the core of one's self—the motivator and animator of one's life. The spirit is what gives one the ability to bounce back. The conception of resiliency discussed here blends both Native and western philosophies. It is put forth as a set of Native identity based characteristics that have transcended historical oppression and current-day adversity. The spirit is not a material form, so it is indestructible.

The NNYSA program, in its practices and guiding policies, is grounded in the holistic concept of resiliency as defined. It emphasizes the inner spirit through traditional Native teachings and holistic healing.

The literature identifies a number of risk and shield resiliency dynamics in populations defined to be under stress.⁵ Drawing on the work of Steven Wolin and Sybil Wolin⁶ and supported in the work of others,⁷

Figure 1: Holistic Definition of Resiliency

Individual's ability to cope with adversity

Risk: Adversity and stress Shield: Spiritual self Recognize that effective coping strategies develop from adversity and increase an individual's ability to respond positively to future adversity

Availability of community support for the individual

Risk: No support networks Shield: Community supports

there are seven personal resiliency dynamics: morality, humour, creativity, initiative, relationships, independence, and insight. The components of this perception of resiliency parallel conceptions of traditional teachings and holistic healing within First Nations culture. (See Table 1.) This lends support to the holistic definition of resiliency offered, in which individual spirit is highlighted.

The NNYSA's adherence to the holistic definition of resiliency presented is seen as key to its success. It is of course necessary to develop a scientific review of the program to conclude this. In the absence of this at present, it is possible to use existing treatment centre data and case illustrations to put it into context and support the discussion. Before reviewing the NNYSA treatment program's grounding within the concept of resiliency, the program is briefly described.

NATIONAL NATIVE YOUTH SOLVENT ADDICTION PROGRAM

The NNYSA program was established in 1996 through a partnership between First Nations people and Health Canada (First Nations and Inuit Health Branch). It is a solvent addiction residential treatment

Tololo 1. Waling/ Docilion or Traite

program with nine sites across the country. All programs are culturally based and governed by First Nations people. There are currently 112 residential treatment beds for First Nations youth ranging in age from 12 to 26. Programs vary by structure, from co-ed to gender based, and from continuous to block intake. The nine centres are linked through the Youth Solvent Abuse Committee (YSAC) network, which involves program directors, NNYSA representatives and various field experts. YSAC's mission is to provide culturally-appropriate, therapeutic, inhalant treatment and community intervention programming for First Nations youth and their families.

There is a fair amount of literature on the epidemiology, causes and prevention of inhalant abuse among youth, including First Nations youth. However, there is little information on treatment and even less on residential treatment. This is similarly true of the youth addictions treatment literature in general. However, there is some consensus among researchers and clinicians that residential treatment can be helpful for individuals who have special needs or require intensive programming, such as chronic solvent abusers. Pamela Jumper-Thurman and Fred Beauvais suggest that treatment for solvent abusers should be long-term

Wolins' Resiliencies	Traditional Teachings		
Morality	Interconnectedness; respect; humility; faith		
Humour	Teasing as acceptance and welcome; balances the seriousness of life; facilitates learning		
Creativity	Survival; tool making; continuance of life		
Initiative	Personal courage; integrity; freedom; autonomy; promotes wholeness and quality of life for all		
Relationships	Kinship; sharing; unconditional love; generosity; community		
Independence	Mastery; taking on of adult roles; courage; non-interference; reciprocity		
Insight	Vision quest/fast; strength; knowing self in relation to all else; identify development in relation to gender, spirit name and clan		

because "... solvent abusers... have a greater breadth and depth of problems." Conversely, some research claims residential treatment programs for inhalant abuse rarely survive for a multitude of reasons including the degree of difficulty that treating solvent users entails. Phe NNYSA program has proven otherwise and demonstrated innumerable successes in its seven years of operation. As proposed, one recognized reason for the NNYSA's success is its adherence to a holistic conception of resiliency through its policy and practice.

In the past decade, Canadian health care in general has experienced a paradigm shift to a more holistic way of viewing health issues. The population health or determinants of health approach has been given significant weight in health policy papers and health service accreditation programs. 13 A definition of health from a Canadian health promotion perspective refers to the "bodily, mental and social quality of life of people, as determined in particular by psychological, societal, cultural and policy dimensions."14 The concept of health has grown to be inclusive, accounting for more than merely the absence of illness. In principle, this paradigm shift supports holistic resilience as a means of solvent abuse treatment because it accounts for much more than the eradication of the inhalant abuse behaviour.

RESILIENCY IN THE CONTEXT OF INHALANT ABUSE TREATMENT

Assisting Youth With Uncovering Their Inner Spirit

As discussed, the concept of resiliency adopted by the NNYSA program is holistic in nature. It accounts for the balance between one's ability to cope and the availability of community support. It acknowledges the influence of risk and protective dynamics. Further, an individual's spirit is seen as central to his/her ability to bounce back. The NNYSA treatment centres promote this holistic concept of resiliency through cultural teachings and programming as well as policy development. Cultural programming begins with a belief in a world view that promotes a holistic perspective of life, placing traditional healing practices and cultural values in the forefront.¹⁵ As such, programming reflects the four components of reality: spiritual, emotional, physical, and mental. Spirituality is believed to be the core or the foundation for the other three dimensions. (See Figure 2.) This belief comes from the Anishinabe or Original

People Creation Story. Every culture has a Creation Story that informs the people of their origins. The Anishinabe Creation Story talks about all colours of people and how each was given their own instructions by the Creator, their own values, purpose, and gifts to carry in life. It is said that it is one's spirit that carries this bundle from the spirit world to the physical world.

In the First Nations perspective, the attachment to a Creator and ways of accessing the Creator through spiritual ceremonies and practices are important factors in building resilience. The alliance between strong spirituality and resilience may arise from the increase in confidence, optimism, and belief in the meaning of life. Time after time, clients of the WBY-ITC and NNHC rate spiritual and traditional program components as the most influential factors in their recovery. Similarly, studies have concluded that clergy or church attendance are important sources of support and role models for resilient children and adults. A 2000 study supports that individuals successfully recovering from substance abuse

. . . . tend to report high levels of religious faith and religious affiliation . . . Results also indicate that among recovering individuals, higher levels of religious faith and spirituality were associated with a more optimistic life orientation, greater perceived social support, higher resilience to stress, and lower levels of anxiety. ¹⁸

Figure 2: Holistic Resilience

Mental

Morality and Independence

Morality Spirit Insight

Emotional

Relationships and Humour

The inherent values of the original people of North America are kindness, caring/sharing, honesty, and strength. The family, extended family and community are charged with parenting a child in a way that reflects and strengthens the expression of these values. These values are said to be ever present despite the level of nurturing and support that a child receives. The NNHC nurtures these values in its programming by including natural medicines for detoxification (burdock, valerian and dandelion root); sweat lodge, fasting, naming, and spirit feast ceremonies; drumming and socials; and traditional assessments by Elders to determine client specific spiritual needs. (See Photograph 3.)

There is a connection made between the cultural activity and the individual's spirit. This connection is fostered in innumerable ways including sharing traditional teachings about each activity before an individual chooses to participate. Gender-based teachings that facilitate an understanding of male and female roles and responsibilities are important for youth. For example, male youth are taught about their relationship and responsibility to the fire and female youth are taught about their relationship and responsibility to the water. This activity

. . . generates a sense of the interconnectedness and interrelatedness of all-that-is a spiritual cent[re] that imbues all life with a quality that is not only deserving of respect but itself motivates a respectful relationship with one-self and others. ¹⁹

Strengthening Youth Spirit by Drawing on Available Community Resources

It is well documented in the literature that adversity coupled with the absence of community support are direct contributors to youth inhalant abuse.²⁰ The healing path supported by the NNYSA program is about making connections to one's self as well as the universal family of Creation. Youth drawing on community supports to strengthen their resilience is central to the Creation story.

NNYSA's recognition of the importance and integration of an individual's community (social and family support) into the treatment process addresses in part a key criticism of residential programs in general: recovery cannot occur in environments and with people other than where and with whom they live and work daily. Some argue that if the community is not fully engaged in the recovery process and the individual does not recover directly in the home community,

Photograph 3



A traditional sweat lodge

the individual is destined to fail. This is because s/he will not have acquired or had the opportunity to practice the new skills in the home environment while environmental factors will not likely have changed.²¹ For example, reports from Davis Inlet, Labrador, support that many of the children who were sent to residential treatment for solvent abuse relapsed when they returned home.²² In part, this may reflect the chronic problems that plagued their community.

A key assumption leading to the establishment the YSAC programs was that young solvent abusers needed a safe place for detoxification separate from their home communities. This was because it was evident in many cases that families were not always supportive and were often highly dysfunctional. The support of a family network cannot be assumed to exist for some young solvent abusers. This needs to be addressed as a part of the inhalant abuse problem.²³ To illustrate this, the work of Matthew Owen Howard and Jeffery Jenson found that inhalant users were more likely to have low family support and cohesiveness, low self-esteem and substance abusing parents and peers.²⁴ Similar findings were uncovered in a recent Canadian study.²⁵ As discussed, the holistic definition of resiliency supported here encourages accessing available community supports. This is evident in the policies and ensuing practices of the WBYITC and NNHC programs.

Also fitting with NNYSA's perspective, the literature supports the importance and effectiveness of after-care and follow-up to residential treatment.²⁶ It is suggested that after-care and follow-up often need to be long-term, involve multiple community resources and include community re-integration. It must consider a multitude of intervening factors including ease of access to inhalants, detrimental effects on mental

functioning, social factors, environment, and peer pressure. Such considerations are also evident in the policies and practices of the NNYSA treatment centres.

The WBYITC and NNHC residential services for First Nations youth are complemented by services designed to build capacity and promote resiliency in youth by drawing upon resources in their communities. In addition to assisting the youth in understanding their inner resilience, the youth are taught how to seek external protective factors in their communities such as through the school system, community support groups, and Elders.

One of the unique practices of the White Buffalo treatment program is that it requests community aftercare plans for the client before the client is accepted into treatment. The after-care plan is reviewed midway through treatment to ensure continued relevance and community commitment. The emphasis of the plan is documentation of all available community supports for the youth and to clearly identify who is responsible for helping the youth make the transition back into the community.

To further illustrate, the outreach policy of the WBYITC ensures activities and interventions are conducted at the community level. For example, incidents of cluster sniffing are addressed in a way that involves the whole community. It is the policy of the WBYITC to not intervene in an identified sniffing crisis unless four to five community volunteers are available to be part of the planned intervention. Community members (parents, aunts/uncles, cousins, counsellors) fully participate in the intervention, from identifying the perceived symptoms or risk factors to being trained by WBYITC staff to deliver healing sessions in a weeklong condensed form of the residential treatment program. This method of capacity building leaves the tools for effective early intervention within the com-

Photograph 4



White Buffalo Mobil Treatment Centre 1999, Thunderchild First Nation

munity and adds to a community's resilience and ability to deal with early stage sniffing. (See Photograph 4.)

The NNHC program includes the regular participation of family workers through monthly reviews of the treatment plan of care and regular communication. All the way through this process, community referral workers become educated about the skills the youth learn in treatment and how they could support and facilitate the continuance of these skills in the community. Referral workers are also encouraged to refer more than one youth from the community as a way of building a natural support network for both the youth and the family.

In 2000, the NNYSA program negotiated a national policy change with Health Canada, First Nations and Inuit Health Branch, to allow its treatment centres to include family participation in the calculation of performance criteria for occupancy. This national policy change allowed the NNHC to restructure its own policy on how families participated in the treatment program. Because of that, youth acceptance into the program became conditional upon confirmation from their family that at least two significant caregivers would participate in the family portion of the program at the treatment centre for a minimum of five days. The results have been astounding. Family participation rates prior to the policy change were at an annual average of 73 per cent of families participating in two days of face-to-face interaction and conference calls. That increased to an annual average of 97 per cent of families (at least two family members per youth) participating in 10 days of face-to-face interaction and monthly conference calls. In the 2002 NNHC Client Satisfaction Survey, 99 per cent of parents rated their satisfaction with the treatment program and staff assistance skills as very good or excellent.²⁷ Client completion rates have also improved by seven per cent, from a 73 per cent average prior to implementation of the new policy to an 80 per cent average over the three years following the policy change.

NATIONAL NATIVE YOUTH SOLVENT ABUSE PROGRAM POLICY SOLUTIONS

In addition to practice, the NNYSA program has placed extensive attention on generating and implementing policy solutions regarding residential treatment for youth inhalant abusers and their health within their communities. NNYSA developed three key policy solutions for creating and maintaining the health of First Nations youth inhalant abusers: expanded community involvement, re-examination of

the definition of those returning to inhalant use as failure, and addressing the link between solvent and other drug use. These policies are guided by the holistic definition of resiliency including the roles of culture, spirituality, and community to create and maintain the health of First Nations youth.

As the NNYSA program has progressed over time, its policies have also evolved. One area of policy growth has been enabling treatment centres to increasingly include outreach and community-based activities as a part of their mandates. This has allowed treatment centres to plan more proactive, resiliency-focused intervention methods and to more suitably address community needs. This includes early stage prevention, cluster sniffing at its onset, and community teaching. In turn, this has increased the treatment centres' understanding of available community resources. This has translated into greater capacity to build effective follow-up plans. With this new policy in place, one NNYSA centre was able to visit every First Nations community in its province within a two-week span to provide preliminary outreach services.

At the outset of the NNYSA program, client tracking practices defined individual re-entry into treatment as recidivism, that is, returning to using inhalants. The original governmental philosophy was that clients would only be eligible for a one-month to six-month treatment episode during a two-year period. In this sense, re-entry into treatment was viewed negatively. Over time, the NNYSA centres identified a distinctive pattern among its clients who were considered recidivists. Clients' motivation levels for treatment increased upon second entry. They were more ready for change and were generally making the referral themselves. The clients also appeared to be more open to participating in spiritual portions of the programs. It was as if their spirit was awakened during the first treatment episode and their second entry gave them a clearer avenue to explore their spiritual self. Further, it was witnessed that female clients who entered treatment a second time frequently did so by indicating their readiness to explore deeper core issues (i.e., sexual or physical abuse). With all this in mind, the NNYSA changed its recidivism policy. The word recidivism and its negative connotations were removed from the NNYSA vocabulary and replaced with an understanding that treatment re-entry is a necessary part of the treatment process for some.

NNYSA treatment centres recognize the impact of early stage inhalant use and its predictive value for

later drug use. Research has found that abuse of inhalants during childhood and early teens is related to later use of illicit drugs and other drug involvement. It is not clear that inhalants are a gateway drug. Rather, inhalant abuse may be a marker for risk of other drug use. For this reason, NNYSA policy directs treatment approaches to not centre exclusively on inhalants as the drug of choice. Clients receive education on all substances. The resiliency model is used to emphasize the position that by building a strong shield during early teen inhalant treatment, a youth is developing and enhancing the skills necessary to resist other drug use at later life stages.

FUTURE DIRECTIONS FOR HOLISTIC RESILIENCE RESEARCH

The integration of holistic resiliency practices and policies into residential services at two First Nations NNYSA treatment centres in Canada has been the focus here. To date, treatment centre data, case illustrations and client feedback have favourably supported the effectiveness of the centres. For example, follow-up data for the NNHC showed that 82 per cent of past clients in 2000 and 95 per cent in 2001 reported abstinence from inhalants in the six months following treatment. While 82 per cent of youth were not in school at the time of admission in 2001, 67 per cent of these youth returned to school after treatment.³⁰

For these successes to be evaluated, the authors suggest four initial research areas. The first is the development of an inventory of what holistic resiliency is comprised of to provide qualitative and quantitative measures of pre- and post-residential treatment outcomes. The follow-up with clients should move beyond the documentation of relapse and toward measuring resiliency traits and positive life changes that are maintained after treatment, even if relapse to the drug of choice has occurred. Secondly, it is suggested that a structured review of inhalant abuse treatment best practices be conducted, highlighting the role of resiliency. Thirdly, there is a need to evaluate community prevention and intervention attempts and their focus on resiliency, in particular where peer cluster sniffing is out of control.³¹ Finally, it is important to account for the role of gender in these suggested areas. Research has shown that females and males display different resiliency dynamics that are often dependent upon their age.³²

CONCLUSIONS

The need for inner resiliency is paramount in the economic, social, psychological, and spiritual stresses faced by youth today. They are no less challenging than the physical adversity of yesterday. The recent expansion of the view of health beyond the individual to the family and community and the recognition of social, psychological, and spiritual environments as influencing health are consistent with the broadened and holistic interpretation of resiliency. The challenge will be to explain the conceptual links between health promotion and resilience and to test mechanisms that foster resilience in treatment, in particular for First Nations youth inhalant abusers. Strategies within the First Nations community may include creating supportive environments as well as promoting self-esteem, effectiveness and empowerment. Participatory, applied and evaluative research is therefore timely. Resiliency theory has considerable promise for application for First Nations and non-First Nations health promotion programs and policies in Canada if it is based on sound theory and research.

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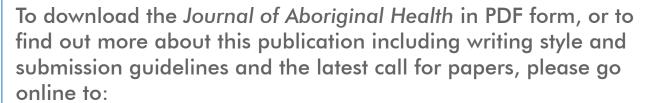
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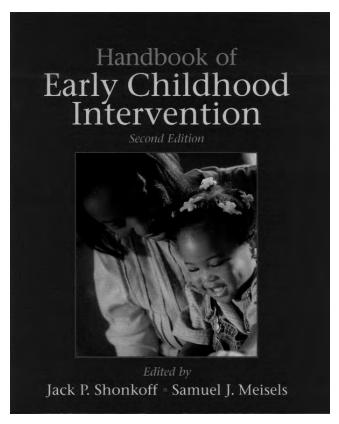
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Jack P. Shonkoff is the Dean of the Heller Graduate School and Samuel F. and Rose B. Gingold Professor of Human Development at Brandeis University. He also serves as Chairperson of the Board on Children, Youth, and Families at the Institute of Medicine and the National Research Council/National Academy of Sciences and is Chairperson of the Committee on Integating the Science of Early Childhood Development

Samuel Meisels is a professor in the School of Education and a research scientist at the Center for Human Growth and Development at the University of

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Michigan. He is president of the Board of Directors of Zero to Three: The National Center for Infants, Toddlers, and Families. He is also a senior principal investigator for the national Early Childhood Longitudinal Study and the Center for the Improvement of Early Reading Achievement.

Healing the Generations:

Post-Traumatic Stress and the Health Status of Aboriginal Populations in Canada

Terry L. Mitchell, PhD, C. Psych.,
Department of Psychology, Wilfrid Laurier University, Waterloo, Ontario, and
Dawn T. Maracle, MA,
Ontario Institute for Studies in Education, University of Toronto, Ontario

Abstract

The enduring impact of colonization and loss of culture are identified as critical health issues for Aboriginal populations. The authors discuss the concepts of historical and intergenerational trauma identifying steps to address the past as Aboriginal Peoples move forward to a healthy future. The authors analyze the enduring and unacceptable health inequalities between Aboriginal and non-Aboriginal people in Canada. This paper emphasizes the importance of addressing the substantial historical reasons for this inequality. The authors suggest that current popular explanations for such gross differences in health are limited and lack substantive historical perspective. Post-traumatic stress disorder is discussed critically as an important concept for understanding Aboriginal health inequalities. Post-traumatic stress response, versus disorder, is presented as a less stigmatizing and potentially culturally-appropriate framework to view the inequalities in a historical and political light. A historically and politically-based stress response is proposed as a framework for understanding the health inequities between Aboriginal and non-Aboriginal people to advance healing for indigenous people worldwide.

Key Words

Aboriginal, post-traumatic stress disorder/response, culture, residential schools, health, colonialism, historical trauma, intergenerational impact

INTRODUCTION

We have already paid the price. It's time to accept the many blessings that the creator has in store for us. We must honour our people who sacrificed everything through honouring ourselves and healing ourselves. By healing ourselves, we will also heal the wounds of our ancestors and the unborn generations.¹

Canada is well-known for enjoying a high standard of living-among the best in the world-and for being an international leader in the theory and practice of health promotion. Canada has also been criticized because the health of Aboriginal Peoples in this country resembles that of people living in economically disadvantaged and underdeveloped countries. Aboriginal people die earlier than non-Aboriginal people and have a greater burden of physical and mental

disease.² However, the reasons for this health inequality are not well understood. In this paper, the authors discuss the importance of acknowledging and addressing historical and intergenerational trauma in Aboriginal communities. Systemic racism, policies of assimilation, and cultural genocide are rarely identified as critical to contemporary health crises. Post-traumatic stress as a result of loss of culture and historical as well as intergenerational trauma is presented as an explanatory factor for the largely unexamined question of why gross health inequalities exist.

HEALTH STATUS OF ABORIGINAL PEOPLES

Issues of equity in health and well being for Canada's Aboriginal peoples are important to any vision of a just society.³

Despite tremendous progress, the health of the Aboriginal population in Canada continues to be significantly poorer than that of the national population.⁴ A recent report on the Health of Off-Reserve Aboriginal Populations⁵ found that Aboriginal people are 1.5 times more likely to have chronic health conditions and long-term restrictions on their activities than non-Aboriginal people. About 60 per cent were reported to have at least one chronic condition. High levels of diabetes and end-stage renal disease, cardiovascular disease, and some forms of cancer as well as injury and pneumonia⁶ have been identified as more common in Aboriginal populations than the general Canadian population. Mental health issues or issues of imbalance are reflected in high levels of depression, addiction, and suicide rates.⁷

Health Inequalities

There are enduring and unacceptable inequalities in the health of Aboriginal Peoples. The authors propose that there is a real, yet largely unaddressed, historical reason for these health inequalities. Mental health and social problems in Aboriginal communities have been linked to social and cultural disruption and historical trauma. However, the physical health of the population has not been adequately nor consistently linked to the historical and social-political context of the lives of Aboriginal people. This failure to remember and hold significant the history and long-term impact of domination and cultural genocide has led to limitations in current explanatory frameworks and to inadequate health interventions.

As a whole, Aboriginal populations still suffer from gross social and economic inequalities compared to non-Aboriginal Canadians. Many Aboriginal communities suffer incomes well below the poverty line, high levels of unemployment, low rates of high school completion, and inadequate housing (20 per cent of Aboriginal communities in Canada still have limited or no access to clean water).8 Social and structural injustices compounded by unequal access to health information and services all contribute to the striking differential in health status between Aboriginal and non-Aboriginal populations. However, recent evidence from Statistics Canada based on data from the Canadian 2001 Community Health Survey has identified that the severe health inequities endured by Aboriginal populations cannot be accounted for simply in terms of low socio-economic status, 9 as is often suggested when discussing the health of Aboriginal Peoples. They also cannot be accounted for in health risk behaviours that frame

health status within an individual's control. This is an important finding, one that challenges an individualistic approach to health inequities. That is, the health status of Aboriginal Peoples cannot be attributed solely or even largely to poverty or to individual choices and lifestyles, a common and limiting one-dimensional way of looking at issues of Aboriginal health.

This brings the key question of this paper into focus. What contributes to the enormous difference in health status between Aboriginal and non-Aboriginal populations? Despite extensive documentation of the health and social problems within Aboriginal communities, inadequate weight and attention outside of Aboriginal communities themselves has been given to the root source of these problems. By raising the question of historical stressors¹⁰ and post-traumatic stress responses (PTSR) as critical to an understanding of current health status, the authors do not attempt to provide a simple solution to a complex and enduring challenge for Aboriginal communities. Rather, the authors wish to challenge the policies, programs, and health-funding strategies that fail to ask why this differential in health status exists and how it can be addressed in a timely manner. The question is no longer, What are the problems? The more appropriate questions are: Why do these differentials exist? What will be done to address these health inequities? What are successful models? and How can we implement them more widely?

Loss of Culture, Historical Trauma, and Unresolved Grief

Articles on the health of Aboriginal people discuss the experience of collective and intergenerational trauma that has been referred to as the Native holocaust¹¹ and/or soul wound. The chronic trauma of both post-traumatic stress and intergenerational effects has been identified as historical trauma.¹² Historical trauma is referred to as collective emotional and psychological injury over the lifespan and across generations. It is viewed as resulting from a history of genocide with the effects being psychological, behavioural, and medical.¹³

Historical trauma response has been identified as a group of reactions to multigenerational, collective, historical wounding of the mind, emotions, and spirit. Historical trauma for Aboriginal populations is understood to be linked directly to the banning of cultural practices, policies and institutions of assimilation, and loss of culture. This is described as a process in which previously strong cultural identities,

rooted in traditional practices and world views, were devalued and replaced by cultures of dependence and imbalance.

... under the relentless influence of forced assimilation, economic dependence and isolation, Aboriginal cultures have undergone a process of deculturation. Evidence for this process of cultural degeneration is found in such phenomena as alcoholism, substance abuse, suicide, family violence, sexual abuse, child neglect, vandalism and theft, all of which are epidemic in many Aboriginal communities. It is paramount to notice that none of these indicators of cultural and identity degeneration characterized pre-colonized Aboriginal culture.¹⁴

Deculturation, or cultural degeneration and loss, and related historical trauma are identified as leaving a "legacy of chronic trauma and unresolved grief across generations." This devaluing and loss of culture has had long-term and intergenerational effects. It raises critical health challenges including new epidemics of injuries and social problems for Aboriginal communities. These have been identified as more difficult to address than the infectious diseases that historically killed many Aboriginal people and dramatically reduced the population of Aboriginal communities. The compounding trauma of cultural devaluation and loss and social ills is therefore important to assess in attempting to understand the current health crises within Aboriginal populations.

POST-TRAUMATIC STRESS AS A POTENTIAL FRAMEWORK FOR EXAMINING HEALTH DIFFERENTIALS

You don't come with guns anymore; you don't have to. You come with briefcases and we kill ourselves.¹⁷

Post-Traumatic Stress Disorder Defined

Post-traumatic stress disorder (PTSD) was first introduced into the American Diagnostic and Statistical Manual (DSM) in 1989.¹⁸ Post-traumatic stress arises from external trauma and terrifying experiences that break a person's sense of predictability, vulnerability, and control.¹⁹ Aboriginal Peoples' experiences of contact and cultural domination may reasonably be

viewed as a loss of predictability and control and increases in vulnerability. As a case in point, a report on the mental health needs of 127 survivors of residential schools in British Columbia²⁰ found that 64.2 per cent of these individuals met the diagnostic criteria for PTSD.²¹ While these individuals may have been more affected than others, as they were motivated to endure the hardships of court proceedings, there is nevertheless an important validation of the potentially high rates of post-traumatic stress in Aboriginal communities that have suffered the abuses of residential schooling.

In the United States, considerable research has been done on the issues of PTSD and intergenerational trauma. Historical trauma and unresolved grief have been identified as key issues for Native Americans.²²

While not all Aboriginal people experience posttraumatic stress, current health inequalities suggest that historical trauma should at least be considered during diagnosis and treatment. The diagnostic criteria for PTSD include exposure to an external trauma that results in intense fear, helplessness, or terror that endures for 30 days or more and results in significant social or occupational distress. PTSD affects individuals in a vicious cycle of denial, avoidance, and becoming overwhelmed with memories and related feelings. The impact of PTSD affects the mind, emotions, body, and behaviour. Mentally, people who are traumatized may develop negative beliefs about themselves and their world. Emotionally, they may experience cycles of denial and anxiety. Physically, they can experience sleep disturbance, heightened sensitivity and anxiety, nightmares, and flashbacks. Behaviourally, they may avoid certain situations, isolate themselves socially, drink, and become increasingly aggressive. The three main characteristics of a PTSD affect the mind, emotions, and the body. The mind is affected by re-experiencing through dreams, flashbacks, unwanted memories, and repetitive thoughts. The emotions are affected by avoidance and numbing such as avoiding social contact, avoiding memory triggers, using alcohol or drugs to numb, and dissociation. The body is affected by exaggerated startle responses, sleeplessness, and anxiety.

Four Factors Regarding Conceptual Relevance of PTSD to Aboriginal Health

While there is little representation of Aboriginal people in large population health studies on post-traumatic stress to date, post-traumatic stress has been used as a culturally-appropriate marker for Aboriginal distress.²³ Despite the generally negative association society has with psychiatric diagnoses, the authors cautiously suggest that the diagnostic criteria for PTSD provides a useful model for beginning to understand the reason for the gross health inequities between Aboriginal populations and the non-Aboriginal Canadian population. PTSD has been criticized as a psychiatric term that "individualizes social problems and pathologizes traumatized people."²⁴ The authors argue that the uniqueness of the PTSD diagnosis within the DSM contradicts this criticism. The authors propose that the diagnostic profile provides a useful tool in confirming the long-term impact of colonialization, which may increase access to appropriate healing resources.

While the PTSD criteria were defined in terms of individual trauma, the diagnosis and treatment resources have also been applied to groups or populations affected by natural and man-made disasters and terrorism. The work of Eduardo Duran et al.²⁵ has paved the way to understanding and responding to trauma at the community and nation level. The authors agree with Bonnie Burstow²⁶ that healing from trauma should take place outside of a psychiatric frame and that a program of radical adult education will focus on strengths and capacities rather than illness. This is an existing practice of leading PTSD healing programs that are grounded in respect and support rather than blaming or focussing on weaknesses and illness.²⁷

While the authors disagree with the use of the term "disorder," they believe the PTSD framework is an important model to consider in assessing the reason for and potential responses to current health inequalities. Post-traumatic stress is unique as a mental health diagnosis because one cannot meet diagnostic criteria unless there has been exposure to a traumatic event. What is observed among people who have been traumatized, therefore, is not a disorder but rather a stress response to horrific, intolerable events. The source or cause of the stress response has been defined as a traumatic event or series of events that occur outside the individual rather than resulting from an inherent psychological weakness. While the authors are cautious about suggesting an association with a psychiatric term in relation to the health of Aboriginal populations and specifically with the use of the terminology of DSM disorders, they find the unique criteria of PTSD worthy of review as a framework.

Firstly, PTSD allows for the naming of externally imposed trauma providing a social-historical context

for what has too often been viewed as behaviours or conditions rooted in individual character flaws or cultural deficits.

Secondly, PTSD is useful in an Aboriginal health context because it defines an individual's behaviour as a human response to an external traumatic event rather than a personal weakness or pathology. The fundamental claim is that the person is not to blame for their traumatic experience nor their symptoms. Post-traumatic therapy assumes that the patient's current emotional problems are caused by the traumatic event rather than by an already existing mental illness. Stress reactions are identified as normal patterns of adaptation to extremely stressful life events. Posttraumatic therapy involves educating people about the nature and experience of stress responses, "which reduces a sense of isolation and fear of mental illness and restores a sense of personal control over symptom manifestation."28 The individual or group and the therapist work together to create a safe and supportive relationship in which healing can occur and human dignity and peace with and within oneself can be restored.

Thirdly, PTSD is a reasonable explanatory model for Aboriginal health inequities due to the high degree of emotional distress related to PTSD and associated increases in alcohol use. A high degree of other emotional health issues, such as anxiety, depression, and substance abuse co-exists with PTSD.²⁹ Among individuals with PTSD who seek treatment, up to 80 per cent have at least one additional mental health diagnosis including affective disorders (26 to 65 per cent), alcohol and drug abuse (60 to 80 per cent), or anxiety disorders (30 to 60 per cent),³⁰ all of which have been cited as contemporary social and emotional problems in many Aboriginal communities. Self-medication is common among people who experience PTSD. People use alcohol or drugs to reduce symptoms, therefore, alcohol and drug dependency treatment is often a part of PTSD therapy.31

Fourthly, the PTSD explanatory model is associated with increased risks of physical health problems including heart disease, stomach problems, abnormalities in thyroid and other hormonal functions, increased infections and immunological disorders, chronic pain syndromes, 32 and other forms of illness. 33 In their recent book on PTSD, Edna Foa et al. state that "trauma survivors report more medical symptoms, use more medical services, [and] have more medical illnesses detected during a physical exam." 34 The correlation between Aboriginal health conditions and the health conditions associated with

post-traumatic stress provides considerable weight to the theory proposed in this paper that post-traumatic stress may be a major determinant of health within Aboriginal communities and a significant contributor to the current inequities between the health status of Aboriginal and non-Aboriginal populations.

COPING RESPONSE VERSUS DISORDER

Having identified a strong rationale for investigating PTSD as a conceptual and clinical model for understanding current health inequities, the authors reject the term "disorder." Given the stigma attached to psychiatry and the negativity and implied weakness and or illness of the term "disorder," the authors propose an alternate term while drawing on the clinical evidence of the DSM. The authors suggest the term post-traumatic stress response (PTSR). PTSR more accurately reflects the diagnostic criteria of the diagnosis and is a more respectful term for use with both individuals and communities. PTSR moves beyond the negative association with blaming the person and provides a compassionate lens from which to better understand a realistic human response to trauma rooted in oppression and cultural domination. The PTSR model serves as a place to begin to discuss the factors contributing to the health inequalities endured by indigenous peoples worldwide.

The authors suggest that a PTSR model for understanding and addressing various forms of trauma including cultural degeneration and loss is a critical aspect of healing that will acknowledge historical trauma and promote healing within holistic programs culturally appropriate to the individuals and nations for which they are designed. The authors present five components of a PTSR model for addressing Aboriginal health inequities. They are:

- 1. an acknowledgment of a socio/historical context;
- 2. a reframing of stress responses;
- 3. a focus on holistic health and cultural renewal;
- 4. a proven psycho-educational and therapeutic approach; and
- 5. a communal and cultural model of grieving and healing.

1. Social/Historical Context

PTSR within Aboriginal communities may arise from a multitude of individual and community trauma, within and across generations. This compound trauma is referred to as historical trauma that is rooted in cultural loss. The Royal Commission on

Aboriginal Peoples provides important documentation of the experiences of Aboriginal Peoples' in Canada. It makes a direct link between trauma and physical health. In the last 10 years, there have also been positive developments that have broken the silence surrounding residential schools.

Partnering and sharing information about the social/historical impacts on the health of indigenous people and conducting research between similar populations such as Aborigines in Australia, Maori in New Zealand, and First Nations and Native Americans in North America can serve to further enable society to understand some of the complex issues involved in providing more effective heath care. Solid partnerships with clear and concise goals in common can help further identify the relationship between historical trauma, health inequities, and strategies to improve health outcomes within and across indigenous communities in Canada and abroad.

2. Reframing Stress Responses

The PTSR model reframes PTSD symptoms as human responses to extreme circumstances. The disorder is clearly identified as a response to an external trauma that is outside the range of tolerable human experiences. The PTSR model promotes compassion for individuals and communities who have endured external trauma that is so profound that it affects their ability to cope. A process of naming historical and systemic sources of personal and social ills (imbalances) provides a critical, compassionate, and political lens from which to view current health inequities. As health care providers become more aware of the social/historical origins of distress, the more compassionate and therefore the more effective they can be in the delivery of health services to Aboriginal communities. As communities name historical stressors, stress responses can also be renamed and increasingly managed and transformed to health promoting behaviours and positive health outcomes.

3. Focus on Holistic Health and Culture Renewal

Most health initiatives, research, and services are designed to deal with specific aspects of health. There are mental health centres and health clinics. The mind and body dualism of the western medical model continues to be maintained within the mainstream health care system. For example, independent research and services are funded for heart health, diabetes, and cancer care despite the existence of com-

mon risk factors. A PTSR model views mental health and physical health as inseparable. The PTSR model looks at life experiences and environmental stressors as preconditions for health and illness. It promotes a holistic perspective on health that is consistent with cultural concepts of the Medicine Wheel with its focus on the interaction and balancing of the mind, emotions, spirit, and body. Post-traumatic stress is characterized by intense and constant effects on the mind, body, emotions, and spirit. Mainstream therapy for PTSD has responded to the need for respectful approaches to healing that incorporate a lifespan approach to healing, focus on capacity building, and address all aspects of the person's response. This includes behavioural responses that need addictions counselling as part of, or in addition to, PTSD counselling programs. A PTSR model would acknowledge historical stressors and the importance of culture, Elders, community processes, and traditional healing.

4. Proven Psycho-Educational and Therapeutic Approaches

People can and do recover from post-traumatic stress and heal the mental, physical, emotional, and spiritual wounds. Great attention has been given to the clinical and therapeutic aspects of responding to post-traumatic stress, in particular since the Vietnam and Gulf wars and since the 1980s when society began to break the silence on child sexual abuse. There are effective psycho-educational and therapeutic approaches to addressing trauma that can be adapted to Aboriginal settings and approaches to historical trauma that have been proven effective among the Lakota First Nation. In particular, there are four main aspects to healing from trauma. These include attending to:

- i. the mind by remembering, speaking, and coming to terms with the horrifying, overwhelming experience(s) that led to the trauma response;
- ii. the body by learning to acknowledge and master the physical stress responses like anxiety and sleeplessness;
- iii.the emotions by re-establishing relationships and secure social connections; and
- iv. the spirit by recognizing that the spiritual and the cultural have often been critical aspects of the original wound or trauma for Aboriginal people.

This aspect of trauma work can be seen in the Qul Aun Healing Initiative that promotes well-being and pride in Aboriginal identity through the use of traditional cultural approaches to treatment.³⁵

5. Communal and Cultural Models of Grieving and Healing

The therapeutic approaches to PTSD are consistent with Aboriginal values of respect, care, and collective models of healing. PTSD healing programs are often conducted in communities reflecting the recognition of a common human response to stress. Most PTSD therapy is done with both individual and group programming. There is great benefit in bringing people together who share a history of trauma. They can identify with one another and further accept their stress responses and support a path to wellness.

There are rich traditions of healing and purification practices in Aboriginal cultures that can be used to help people grieve, to share their experiences of common trauma reactions, and to reduce trauma through increased understanding and cultural renewal. Cultural ceremonies provide individuals, families, and communities structures within which to acknowledge and mourn common wounds. Group healing, within ceremonies, reduces isolation; alleviates guilt, shame, and anger; and enhances feelings of self worth.

The Condolence Ceremony of the Haudenosaunee (Iroquois) is a perfect example of a cultural process wherein part of the group (the non-mourners) act as caretakers to those who are mourning—wiping their eyes so they can see more clearly; cleaning their ears so they may again be able to hear the truth; and clearing their throat so they may once again breathe, speak, and eat in a healthy manner.

MOVING FORWARD: HEALING THE GENERATIONS

Mainstream health interventions directed towards Aboriginal populations are often developed outside of a historical, cultural framework. Health programs are most often disease-specific, focussing primarily on the physical aspect of an individual rather than the emotional, cultural, mental, and spiritual (holistic) aspects of health. Little or no attention is given to personal and collective histories and related trauma. However, prior experiences in attempting to eliminate health inequities have indicated the importance of combining traditional Aboriginal healing methods within a critical historical perspective, along with available western medical resources.³⁷ The report of the Royal Commission on Aboriginal Peoples³⁸ emphasized the importance of Aboriginal perspectives on health. It includes a belief in, and understanding of, the complex relationships between body, mind, emotions, and spirit and the importance of knowing and naming Aboriginal histories and experience.

Various programs have been designed specifically to address historical trauma such as the Aboriginal Healing Foundation (AHF)—an important Canadian initiative that addresses the impact of residential schools. The AHF vision statement focuses on well-being achieved by addressing personal and intergenerational trauma, ending cycles of abuse, and building strength and resiliency in survivors of residential schooling. The AHF programming has identified four phases to community healing: The Journey Begins, Gathering Momentum, Hitting the Wall, and From Healing to Transformation.³⁹ (See Table 1.) These four phase describe a developmental process characterized by moving from crisis to transformation.

These developmental phases are applicable to a wider range of historical and contemporary health and social concerns. The four main elements of community healing that are identified are: leadership, psycho-educational programming, capacity building, and systemic healing. These active phases can shift communities from supporting problem-focussed programming to sustainable health promoting programs and communities grounded in awareness of history and culture.

The Takini Network in the United States has developed expertise relevant to phases two and three of community healing. They conduct research and provide community education and healing to address historical trauma among American Indians. 40 The Takini Network's psycho-educational model for addressing historical trauma is organized around three major themes: trauma testimony, trauma response issues, and moving beyond trauma. The Takini Network's programs focus on education about the historical trauma and its impact, discussing the past in a supportive group context, providing emotional release through collective mourning/healing on both individual and community levels, and reconnecting with traditional cultural values. The Takini Network found tremendous success and benefit in their programming. All of the participants found the intervention helped them with their grief resolution and felt better about themselves after the intervention. Nearly all (97 per cent) felt they could make a constructive commitment to the memory of their ancestors. In a related study,⁴¹ the participants also experienced improvement in their parenting. Participants in the group interventions of the Takini Network report beginning to understand why they have been feeling so bad and why they have been experiencing so many health and social prob-

Table 1: Four Phases to Community Healing

Phase 1: The Journey Begins

Gathering of a core group of people begin to address their own healing needs

Phase 2: Gathering Momentum

Increasing in healing activity with recognition of root causes of addiction and abuse though communitywide awareness workshops

Phase 3: Hitting the Wall

Building healing capacity by providing training and employment with a focus on community development

Phase 4: From Healing to Transformation

Shifting from fixing problems to transforming systems

lems. With this understanding, their pain is transformed into a powerful, life-giving force. These findings illustrate the benefits of including psycho-educational and critical adult education components in healing programs where individuals and groups give meaning to their experience and are empowered to heal and move beyond their pain though knowledge, support, and culture.

The work of the AHF and the Takini Network illustrate critical elements of community development and healing programs that can inform Aboriginal health programming to deal with historical stressors as a shared legacy and which draw upon culture as a common key to wellness and the elimination of health inequities.

OPPORTUNITIES AND KEY SECTORS

Within Canada, Aboriginal structures have been developed that could provide and support leadership for partnership development, research, healing, and knowledge sharing in response to PTSR. The creation of the National Aboriginal Health Organization (NAHO) and the *Journal of Aboriginal Health*; the Institute of Aboriginal Peoples Health; the AHF; and the agreement between Canada, New Zealand, and Australia are important developments in Aboriginal health. Each promotes access to information, capacity building, and self-determination in health with attention to traditional knowledge, success stories, health determinants, and Aboriginal cultures. These are important vehicles for examining the intersection of the past and the present, for addressing the impact of cul-

tural loss and intergenerational trauma, and improving the health status of indigenous peoples in Canada and elsewhere.

Holistic, collaborative health support systems have been identified as important as well as governments that are prepared to address "the racism that remains a barrier to progress in (the) health of indigenous people(s)."42 Post-traumatic stress is a compassionate and useful lens to consider the gross health inequities endured by indigenous peoples within Canada and around the world. The AHF examples are important to the health of Aboriginal individuals, families, communities, and nations. The authors believe the mandate and funding frame of the AHF, or a parallel organization, should be broadened to expand beyond residential schooling to larger issues of cultural loss and historical and intergenerational trauma. Further Aboriginal research and programming in the area of historical trauma that attends to the specific links between trauma and physical health is required to address health inequalities.

More education for all levels of health care providers, researchers, policy-makers, and practitioners is required for the impact of cultural loss and historical trauma to be understood, recognized, and responded to appropriately. Those who work in any of these fields should understand the principles of PTSR assessment and treatment, be informed about traditional and cultural approaches to trauma, and be aware of the potential links between trauma and health status. The authors support emerging health discussions in which historical and intergenerational trauma are viewed as contributing factors to existing health inequalities and not only as contributors to mental health and social problems. These would be addressed across all sectors: research, health, education, and community.

- Further research, policy development, communications, and programming needs to be done by a consortium of Aboriginal organizations to understand and attend to both the historical and contemporary reasons for health inequalities with attention to links between cultural loss and historical trauma.
- Culturally-sensitive delivery of health models that shift the health discussions from a dualistic (mind and body) to a holistic framework are needed. Post-traumatic stress should be a routine clinical question in diagnosis and assessment supported by appropriate clinical training in all of the health professions. Health services should support psycho-educational programming and offer culturally-

- appropriate and effective trauma recovery programming.
- Educators, on-reserve and off-reserve, at all levels from primary to post-secondary schools, should ensure that Aboriginal and non-Aboriginal students understand the impact of history and current social-political-economic relations on Aboriginal people and their health.
- Communities can engage in community development initiatives that reflect the four phases of the AHF model to promote wellness and adapt the Takini Network's proven psycho-educational programming in historical trauma to their individual community and culture.

CONCLUSION

Knowledge about the health status of Aboriginal Peoples has largely been individualized and has been taken out of its historical and political context. In resistance and opposition to this stance, the authors have argued that the gross health inequalities between Aboriginal and non-Aboriginal people must be made a political issue. The current health status of the world's indigenous population is undoubtedly to some degree a result of injuries of colonialism and cultural loss characterized by systemic attempts at domination and cultural genocide. Future health policy and programs must address current structural inadequacies (including inequalities in environmental risk, inadequate housing, and lack of access to appropriate health services and information, etc.) in trying to address the inequalities between the health status of the Aboriginal and non-Aboriginal populations. However, as recent statistical data indicate, health inequities cannot be simply explained by socio-economic status or health behaviours. PTSR is a useful model for understanding and addressing health inequities as it:

- 1. provides a social/historical context for what has been incorrectly viewed as individual/cultural weaknesses, or illness;
- 2. confirms a holistic understanding of well-being and cultural renewal;
- 3. compassionately validates stress responses as appropriate human reaction to trauma;
- 4. offers access to proven psycho-educational and therapeutic approaches for addressing trauma; and
- 5. points to the use of group/community models for collective mourning, support, and healing.

PTSR is presented as a critical and compassionate lens from which to assess and respond to the health needs of Aboriginal people, families, and communities within an historical, contemporary, and holistic perspective that extends beyond mental health to implicate a broad range of health disparities worldwide.

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Further Reading

ETHNOCULTURAL ASPECTS OF POSTTRAUMATIC STRESS DISORDER

Issues, Research and Clinical Applications

Edited by Anthony J. Marsella, Matthew J. Friedman, Ellen T. Gerrity, and Raymond Scurfield
American Psychological Association, 1996
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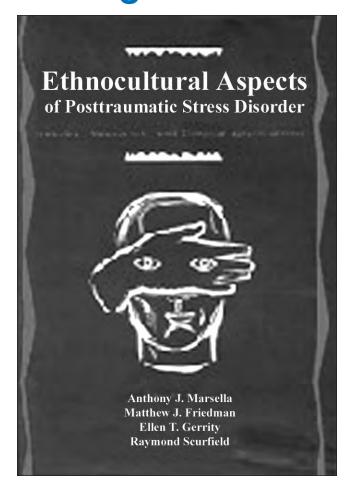
In recent years, the concept of post-traumatic stress disorder (PTSD) has captured the attention and concern of clinicians and scientists. Reactions to traumatic stress have been extensively studied. But are such reactions universal? Although the PTSD diagnosis is now used internationally, it is by no means clear whether it is meaningful across cultures and ethnic groups. Most of the research and clinical experience validating the diagnosis has been carried out in western industrialized nations. Some clinicians have raised the question of ethnocentric bias in its formulation.

This richly documented, edited volume is the first systematic examination of ethnocultural aspects of PTSD. Leaders in PTSD research and practice explore universal and culture-specific reactions to trauma. They discuss implications for research, treatment, and prevention. The multidisciplinary perspective of *Ethnocultural Aspects of Posttraumatic Stress Disorder: Issues, Research and Clinical Applications* will appeal to a broad audience of psychologists, psychiatrists, anthropologists, epidemiologists, sociologists, and social workers.

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Social Capital as a Health Determinant in First Nations:

An Exploratory Study in Three Communities

Javier Mignone, PhD and
John O'Neil, PhD
Centre for Aboriginal Health Research
Department of Community Health Sciences
University of Manitoba

Abstract

The study examined the concept of social capital in First Nations communities. Its two main goals were to clearly define social capital and to create culturally-appropriate methods for measuring it in First Nations communities. The research was conducted with the participation of three First Nations communities in Manitoba. After offering a brief summary of the findings of the study, the paper discusses social capital as a determinant of health in First Nations communities and possible research and policy implications.

Key Words

First Nations, health determinants, social capital

INTRODUCTION

More often than not, research and policy on the determinants of health have focused on factors affecting the individual. Although factors like socioeconomic status, educational level, or gender of individuals are important and relevant to how they are associated with health, they are only partial explanations.

The importance of factors at the community level has been increasingly recognized. In 1996, the Royal Commission on Aboriginal Peoples¹ was critical of the individualistic analysis of socio-economic determinants of health.

From a similar perspective, the Health Information and Research (HIR)² Committee of the Assembly of Manitoba Chiefs together with the Centre for Aboriginal Health Research (CAHR) at the University of Manitoba³ proposed a program of research. It would explore more recent developments in the population health model. Among these developments is attention to societal or community-level characteristics that may have more in common with First Nations health models. At the same time as other initiatives, the CAHR produced a study that examined the concept of social capital in First Nations communi-

ties. Its two main goals were to clearly define social capital and to create culturally-appropriate methods for measuring it in First Nations communities. The research was conducted with the participation of three First Nations communities in Manitoba. After offering a brief summary of the findings of this study, the paper discusses social capital as a health determinant in First Nations communities and the policy and research implications of adopting this concept.

SOCIAL CAPITAL IN FIRST NATIONS COMMUNITIES

If social capital, as an environmental factor, is to be considered as a possible health determinant, it first needs to be thoroughly studied to determine if it is a meaningful characteristic of the social environment in First Nations communities. This was done in an earlier study.⁴ It resulted in an understanding of social capital that explains the determinants of health of First Nations communities because it:

• presents a dynamic way of characterizing communities, allowing for comparison on both internal and external social relationships;

- captures social elements that are relevant from a First Nations community perspective; and
- offers a meaningful structure from which to theorize and empirically study potential pathways between social environmental factors and health.

In response to a request from the HIR Committee of the Assembly of Manitoba Chiefs, a study proposal was produced to develop a conceptual framework of social capital and to create culturally-appropriate methods for measuring it in First Nations communities. With funding from the Canadian Population Health Initiative of the Canadian Institute for Health Information, the study was conducted between January 2001 and December 2002.

Three First Nations communities from Manitoba were chosen to be part of the study by the HIR Committee from seven that had volunteered. (See Table 1 for information on these communities.⁵⁾ The study hired a co-ordinator (Janet Longclaws) and 10 research assistants from the three communities to conduct the fieldwork and provide ongoing consultation.

The study consisted of two phases. The first phase of the study had two aims: to contribute to the development of the conceptual framework and to generate a list of survey questions. Over a period of about three weeks in each community, researchers collected primary data through a combination of in-depth interviews, informal focus groups, participant observation, archival research, and unobtrusive observations. A total of 89 people were interviewed.

Following the interview process, researchers identified dimensions of social capital to measure and developed a questionnaire. During the second phase of the study, after extensive feedback and seven drafts, the questionnaire was pilot-tested. Community research assistants surveyed 462 randomly selected adults from the three communities. The large size of the sample allowed researchers to conduct a series of analyses to determine the reliability and validity of the questionnaire. The results of the study were shared with representatives from the communities that participated in the study and with the HIR Committee.

The authors combined an extensive analysis of the conceptual development of social capital in the scientific literature with a thematic analysis of the qualitative data collected in community fieldwork. Details of this analysis are presented elsewhere.⁶ In this paper, the author's summarize the broad dimensions of the concept and provide examples of various dimensions drawn from the fieldwork.

Social capital has been defined in different ways by numerous writers.⁷ The common notion is that social capital of a community is composed of the following elements: social relationships, networks, social norms and values, trust, and resources. As well, some authors⁸ formulated three dimensions of social capital: bonding, bridging, and linkage. When this conceptual model was tested against the field data collected in First Nations communities, the authors concluded that social capital in a First Nation community is based on the degree to which:

- the community's resources are socially invested;
- there is the existence of a culture of trust, norms of reciprocity, collective action, and participation; and
- the community possesses inclusive, flexible, and diverse networks.

The following definition summarizes the conceptual findings of the study. Social capital characterizes a First Nation community based on the degree that its resources are socially invested; that it presents a culture of trust, norms of reciprocity, collective action, and participation; and that it possesses inclusive, flexible, and diverse networks. Social capital of a community is assessed through a combination of its bonding (relations within the community), bridging (relations with other communities), and linkage (relations with formal institutions) dimensions.

The level of social capital of a community is assessed through a combination of its three dimensions (see Table 2 for overall framework).

- Bonding: relations within each First Nation community
- Bridging: horizontal links with other communities, whether they are First Nations communities or other communities (e.g., urban centres)

Table 1: First Nations Communities Involved in the Study

Comm	unity	First Nation	Location	Population
1		Ojibway/Dakota	Close to small city	1,602
2		Cree	Isolated–500km to closest city rail access some distance from community	1,891
3		Cree	Semi-isolated–road access	4,065

• Linkage: connections between a particular First Nation community and institutions like federal/provincial government departments and public/private corporations (e.g., Manitoba Hydro, banks).

Each of the three dimensions has three components:

- Socially Invested Resources: the resources used for the benefit of the community as a whole
- Culture: 9 the relations within the community and between communities and institutions that are characterized by trust, norms of reciprocity, collective action, and participation
- Networks: within the community and between communities and institutions that are inclusive, flexible, and diverse

For the component socially invested resources, the social capital framework includes five descriptors: physical, symbolic, financial, human, and natural. For example, physical resources would be building a recreation centre or paving community roads. Symbolic would be resources that strengthen cultural identity like cultural camps or Aboriginal language programs. An example of financial resources would be access to credit to help people start small businesses. Human resources would be those that help increase the abilities of people through formal or informal education. Natural resources would be land or water that has been protected from pollutants or degradation.

Resources can be consumed, stored, or invested. Capital is a resource that is invested to create new resources. Socially invested resources are considered aspects of social capital in this framework because they are resources that are invested for the good of the entire community, not just for some privileged few individuals. Thus, socially invested resources should be assessed by a combination of the amount of resources invested and the degree to which they are invested to the benefit of the whole community. The following are a few examples that illustrate these ideas.

Examples of the Socially Invested Resources Component

Symbolic

Cultural camps for children and youth are held in one of the communities.

[T]hey'd show the kids how to snare [and] trap beaver; skin beaver, rats, muskrats, moose—anything that tracks. They would always talk Cree. They would make bannock

over the fire, you know, what the people used to do a long time ago. That's what they did with the kids."

Financial

The following observation was made on the relationship with banks. It points to difficulties in this area.

With the majority of Native people, I think it's either you have poor credit, no credit or bankrupt... and because of that, a lot of band members have limited access or no access to funding to start their own businesses.

The culture component has four descriptors: trust, norms of reciprocity, collective action, and participation. First Nations communities with higher levels of trust between community members as well as with community authorities; with stronger positive norms of reciprocity between individuals and groups; with more potential for collective action; and with a higher willingness to participate in community activities would be considered as possessing higher stocks of

Table 2: Social Capital Framework

Bonding

SIR	Culture	Networks
Physical	Trust	Inclusive
Symbolic	Norms of reciprocity	Flexibility
Financial	Collective action	Diverse
Human	Participation	
Natural		

Bridging

SIR	Culture	Networks
Physical	Trust	Inclusive
Symbolic	Norms of reciprocity	Flexibility
Financial	Collective action	Diverse
Human	Participation	
Matural	•	

Linkage

SIR	Culture	Networks
Physical	Trust	Inclusive
Symbolic	Norms of reciprocity	Flexibility
Financial	Collective action	Diverse
Human	Participation	
Natural	·	

SIR = Socially Invested Resources

social capital. An example of positive culture would be a community where people trust chief and council or in general think well of other families; community members are willing to get together to work for common causes; people are willing to volunteer in community activities; and individuals tend to return favours. The following are a few examples that illustrate these ideas.

Examples of the Culture Component

Norms of Reciprocity

There are norms in our community where people do things for other people. It's not written down in stone anywhere. It's just part of the culture. If someone is building a house and says, I need a screw-gun, yeah I have a box, go to my shed and get it. And that person later, the one who loaned the thing may say, I need to borrow an axe of him, and goes back to the guy that borrowed from him.

Participation

The loss of participation at a linkage level was made graphic by one person's statement.

Yes, I guess part of our practice, part of our culture, is doing a lot of community consultation . . . and the federal government slashed that piece of it . . . We used to have community co-ordinators who would do the consultation, set up workshops to inform the people about the changes. The federal government argued that we were doing too much consultation.

Networks can be characterized by how inclusive, diverse, and flexible they are. Higher degrees of these three characteristics would imply higher levels of social capital. Inclusive networks are those that are relatively welcoming of newcomers and to the exchange of information with newcomers. Diversity implies the co-existence of a number of different networks that are capable of interacting in a meaningful way. Flexibility means that the networks can adapt to new, different, or changing needs. Inclusiveness, diversity, and flexibility are actually interrelated qualities. They are different aspects of the same phenomenon. In general, a correlation among these three descriptors of networks should be expected. The following are a few examples that illustrate these ideas.

Examples of the Networks Component

Flexible

The following comment illustrates a lack of flexibility.

You hear a lot of animosities that are carried forward from years back. I've also heard so and so and his family did so and so to this family and so we are not talking to so and so. There is a lot that is carried on for quite a few years.

Diverse

Another individual from one of the communities expressed concern over the lack of diverse bridging networks.

We have to learn how to network with one another . . . even network with our First Nations, even the ones that are the most successful, that have all those facilities in their First Nations. How did you do it? Can you lend us a hand over here?

SOCIAL CAPITAL AS A DETERMINANT OF HEALTH

Other authors have recognized that although

... the health maintenance and illness care of individuals are known to be major determinants of health ... they are still often investigated as discrete behaviours separated from the interplay of social and psychosocial forces that shape them. ¹⁰

According to them,

... this approach limits knowledge regarding their role in shaping health, the forces that maintain behavioural practices and the potential of approaches to changing them.

Health is the product of multiple levels of influence. These include genetic and biologic processes, individual behaviours, and the context within which people live—the social environment. A multi-level approach to community health requires society to take into consideration, and act upon, social determinants. Social capital has been put forward as a characteristic of the social environment and thus as a potential de-

terminant of health. However, for social capital to be identified as a health determinant, three steps are required. First, a clear understanding of how social capital can characterize a community is needed. The previous section provided an overview of the formulation created from the author's study. Second, a model presenting the plausibility of social capital as a factor in health is required. This section will provide ideas for this model. Third, studies that may produce evidence that confirms or contradicts the theory that social capital is a determinant of health are also needed. Studies like the 2002 wave of the Manitoba portion of the First Nations Regional Longitudinal Health Survey are gathering data on social capital that will enable these analyses. The last section of this paper will address further research requirements of this type.

Community social capital as discussed in this study was based on the concept that this capital pertains to the entire community. All components of the conceptual framework emphasize this. A key difference between this formulation of social capital and that of other authors is the multidimensional notion of the concept. Based on initial ideas by Michael Woolcock and Deepa Narayan, 11 the authors further developed these ideas in a comprehensive framework pertinent to First Nations communities. The differences between bonding, bridging, and linkage social capital means a community can have higher levels of bonding social capital while at the same time lower levels of linkage social capital when compared to another community, for example. This implies that there can be relative independence among the three dimensions. As Woolcock has indicated:

... a multidimensional approach allows us to argue that it is different combinations of bonding, bridging and linking social capital that are responsible for the range of outcomes we observe, and to incorporate a dynamic component in which optimal combinations change over time.¹²

The importance of separating the three dimensions is that it captures the reality that communities do not exist in isolation, but in relationship with other communities and with institutions.

The decision of a community to invest in cultural camps and/or First Nations language programs for their children has the potential of increasing the cultural identity of its youth, thus strengthening the community. One of the central effects of colonization was the disruption of the cultural continuity of First Na-

tions and the destruction of the sense of pride as a people. This resulted in serious effects on the health and well-being of generations. The resurgence of First Nations ceremonies, practices, and values has already shown to have powerful healing qualities. Researchers investigating the relations of social to biological processes in disease argue that:

... the enormous complexity of human society and man's capacity through his symbol system to identify with more powerful beings—gods, or chosen leaders or institutions—give him certain invulnerability to limbic system arousal as long as he perceives himself to be socially supported here or in the hereafter. But, if as the result of early or late experience or a combination of both, he comes to perceive himself as helpless and lacking power to control his fate, he may well become more vulnerable . . . (to illness). ¹³

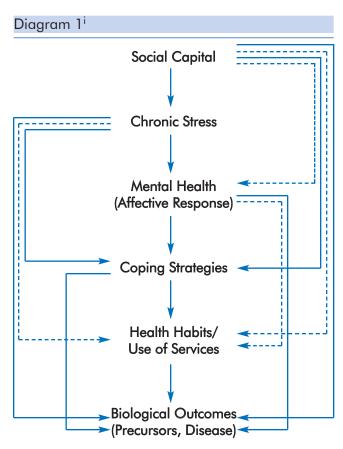
This is why symbolic socially invested resources are so important, whether they be within the community (bonding), jointly with other communities (bridging), or in interaction with institutions (linkage).

A community with higher levels of social capital would be expected to have a culture of trust, participation, collective action, and norms of reciprocity. There has been increasing evidence in population health studies that communities where people tend to trust each other live under less stressful conditions. Stress has been recognized as an important pathway to health or illness. 14 However, trust among community members is only one aspect of social capital (bonding). Trust among members of different communities (bridging) can also have significant impacts. The possibility of learning from what others are doing, the willingness to share resources or information, and the enjoyment of positive relations with other communities impact the well-being of community members. Organizations like the Assembly of Manitoba Chiefs have created spaces of trust, participation, and collective action among communities. This increase in bridging social capital has already had a positive impact in addressing health needs of First Nations.

Studies have shown that the quality of social networks impacts on health. Rigid social networks that exclude others from information or even meaningful social contact are harmful to health. For example, the feeling of exclusion or social isolation has a powerful impact on self-esteem while the lack of information about resources or opportunities limits the access to

those resources and thus to well-being. Studies have related social isolation to an array of adverse health outcomes. 15 Communities with flexible, inclusive, and diverse networks tend to develop a social environment that is more conducive to health because fewer people will be left out of opportunities, dialogue, information, and resources. The same can be said of relations with other communities (bridging) and with institutions (linkage). A community that has a series of well established networks with institutions will have a better possibility of obtaining resources or opportunities, thus increasing its well-being.

In summary, and paraphrasing other authors, ¹⁶ decreased social capital may cause or indicate unjust, exclusive social policies; unequal patterns of participation; and decreased trust, any of which may affect health. Lower social capital might impact the society's influence over an individual's health behaviours, cause or indicate increased uncertainty about the future, or affect access to health services and information. Decreased social capital might weaken informal social support systems, lead to social policies that do not emphasize preventive services, or impact eco-



S.E. Taylor, R.L. Repetti, and T. Seeman, "Health Psychology: What is an Unhealthy Environment and How Does it Get Under the Skin?" *Annual Review of Psychology*, Vol. 48 (1997) p. 411-447.

nomic structures resulting in fewer educational or occupational opportunities.

Diagram 1, adapted from Shelley Taylor, Rena Repetti, and Teresa Seeman, ¹⁷ provides an outline of partial pathways between social capital and health that may link to form more complex pathways. It is a preliminary model that requires further adjustments, development, and testing. Nonetheless, together with a clear conceptual framework of social capital, it provides a basis for guiding future research and policy.

POLICY DISCUSSION

As other authors have indicated, "social determinants of health are societal conditions that affect health and can potentially be altered by social and health policies and programs." The arguments suggest that health is impacted to a large extent by policies defined outside of traditional health policy areas. More so, they highlight how policies that affect the life of communities should be a source of consideration because of their role in ultimately reducing health risks and improving resistance.

Several levels of policy require examination—federal, provincial, regional, and community levels. In relation to areas of policy, these cover a wide range. A central argument of this paper is that health is affected by community-level factors and, consequently, communities need to be identified as objects of policy. Policy decisions, at whatever level, need to take into account how they impact communities' social capital.

Take as an example a situation where the chief and council of a community are debating whether to allow video lottery terminals to be introduced. From a strictly financial point of view, this could be favourable for band administration funds. However, potential negative impacts in the community's social capital would have to be considered in the decision. If the video lottery terminals were to negatively impact families or norms of reciprocity within the community, these considerations could outweigh potential benefits.

On the other hand, investment in organizing powwows could have a positive impact both within the community and among communities, despite funding requirements. The understanding that these factors ultimately have an impact on health and well-being of community members would provide a more accurate information basis for policy decisions.

As a study on Amish communities demonstrated:

... their success is primarily due to the sophisticated organizational structures and practices that promote and preserve social capital in their community . . . with keen social capital consciousness their leaders and members have adopted and fine-tuned efficient and culturally appropriate practices to preserve their sociability and solidarity. ¹⁹

Communities need deliberate policies and co-ordinated efforts to sustain social capital in the face of ongoing political and economic conditions as well as evolving technological and social forces.

The three-dimensional understanding of social capital provides an initial framework from where to develop policies at the different levels. A northern Manitoba First Nations community has experienced a cluster of youth suicides. One of the needs identified by community members and leadership was the development of recreational facilities and programs for children and youth. The expectation was that these initiatives would reduce youth suicide risk factors to some extent. A large recreational facility was constructed. However, it has not opened because of contractual disagreements between the chief and council and the construction company, and with Indian and Northern Affairs Canada. From a social capital perspective, this can be understood as contributing significantly to low linkage social capital. Given the severity of the situation among youth, federal department policy should take social capital as a critically important factor relevant to health and should focus on resolving the dispute to open the recreation centre for community use.

Recently, the City of Winnipeg unveiled a strategy aimed at reducing poverty, improving housing, and creating jobs for the Aboriginal community. Among the initiatives, a transition service was proposed to help First Nations people who move to Winnipeg from rural reserves. This could be viewed both as a socially invested resource of linkage social capital and as increased diversity and inclusiveness of bridging networks. If this initiative is implemented in full, it would be expected to improve the health and well-being, among other benefits, of First Nations individuals affected by the transition to the city.

The concept of social capital offers a lens that takes into account historical factors as they are embedded in current community characteristics, consequently having the potential to offer a richer understanding of these factors as health determinants. For example, the devastatingly deadly diseases in the early years of colonization, the loss of traditional lands, the policies of assimilation and residential

schooling, and the loss of self-government²⁰ can be interpreted as having had a potentially negative impact on the stocks of social capital. However, this interpretation should not be simplistic because the ongoing struggles to counter these forces may also have had the potential of generating stocks of social capital, even if only in one or two dimensions.

The three-dimensional understanding of social capital implies that policies may at times require the sacrifice of one dimension over another. For example, communities with high levels of resistance to external relationships (linkage) may do so to generate high levels of bonding and bridging social capital. The community that resists Manitoba Hydro and funding for flooding of traditional territory may be creating stronger bonds of trust and collective action within the community. On the other hand, a higher degree of internal collective action may provide the leverage necessary for higher levels of linkage social capital. That was the case of a northern Manitoba community that marched in protest to Winnipeg and camped at a public place in the city for weeks, until the funding for housing was obtained.

Approaches to developing policy also have an impact on social capital. The implementation of programs or initiatives without consultation may negatively impact trust, participation, and collective action. Many times, under the rationale of efficiency or cost-effectiveness, programs are put in place while community consultation is curtailed. An accurate costing would have to take into account the potential for a reduction of social capital and ultimately a reduced return on the investment.

Most of these illustrations do not directly address health policy, although these policies ultimately may impact health. The principle is that policy should consider social capital as an intervening variable in health. Policy, and ways of developing and implementing policy that are in the hands of several parties, can have a profound impact on First Nations communities and, consequently, on the health and well-being of their populations.

CONCLUSION

This paper presents ideas that emerged from a study that examined the concept of social capital in First Nations communities and explores the possibility of it being a community-level determinant of health. These are the initial stages in a broader research agenda. Further steps are required to assess if social capital is an adequate descriptor of the social environment of First Nations communities and plays a

role as a health determinant. First, a new round of measurement refinement and validation is necessary. Second, based on findings from the current study and from findings of future studies using the revised tools, further adjustments to the conceptual framework need to be made. Third, formulation of more refined theoretical models of social capital as a determinant of population health are needed. Fourth, studies to test the theories of social capital as determinant of health in First Nations communities need to be conducted. Fifth, further work is needed to empirically establish the pathways between social capital and health. This research agenda requires an effective partnership between First Nations communities, First Nations organizations, and academic centres in a research process that combines conceptual analyses, grounded theory development, and quantitative evidence on an ongoing basis.

ACKNOWLEDGEMENTS

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- 2. The Health Information and Research (HIR) Committee is mandated by the Chiefs of Manitoba to represent the health research and information interests of all 62 First Nations communities in Manitoba. The members of the HIR Committee are all health directors (or designates) representing all tribal councils, independent First Nations, and other First Nations' political organizations in Manitoba.
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- 8. Woolcock and Narayan, "Social Capital," 2000.
- 9. The use of the term "culture" in this study has generated considerable discussion among the First Nations partners. They have expressed concern that the term has a particular meaning in the context of First Nations traditions and world views. In the social sciences, there is a long history of using the culture concept to refer to shared values, norms, and beliefs. It is this more general understanding that has informed this analysis of social capital. Culture, as a component of social capital, refers to values and norms of trust, reciprocity, and collective action. Values related to aspects of First Nations culture such as spirituality are not included in this definition. Similarly, in this paper, the term does not refer to the idea that there are many First Nations cultures that have unique traditions and practices.
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Further Reading

MEDICINE THAT WALKS

Disease, Medicine, and Canadian Plains Native People, 1880-1940

By Maureen K. Lux University of Toronto Press, 2001 ISBN 0-80204-728-9 288 pages

In this seminal work, author Maureen Lux takes issue with the biological invasion theory of the impact of disease on plains Aboriginal Peoples. She challenges the view that Aboriginal medicine was helpless to deal with the diseases brought by European newcomers and that Aboriginal Peoples therefore surrendered their spirituality to Christianity. Lux argues that biological invasion was accompanied by military, cultural, and economic invasions—which, combined with both the loss of the bison herds and forced settlements on reserves—led to population decline. The diseases killing the plains Native Peoples were not contagious epidemics, but the grinding diseases of poverty, malnutrition, and overcrowding.

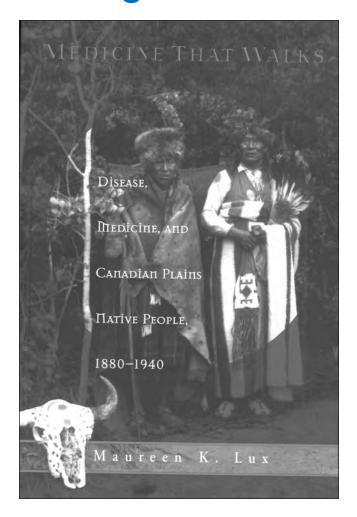
Medicine That Walks provides a grim social history of medicine from the end of the 19th to the middle of the 20th century. It traces the relationship between the ill and the well, from the 1880s when Aboriginal Peoples were perceived as a vanishing race doomed to extinction to the 1940s when they came to be seen as a disease menace to the Canadian public. The Aboriginal Peoples lived and coped with a cruel set of circumstances. However, they survived, in large part because they consistently demanded a role in their own health and recovery.

Painstakingly researched and convincingly argued, this work will change society's understanding of a significant era in western Canadian history.

Lux is a post-doctoral fellow at the Hannah Institute for the History of Medicine.

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Early Childhood Care and Development Programs as Hook and Hub for Inter-sectoral Service Delivery in First Nations Communities

Jessica Ball University of Victoria School of Child and Youth Care

Abstract

Consistent with recommendations in the Royal Commission on Aboriginal Peoples, many Aboriginal communities are investing in early education, cultural transmission, and health for the youngest generation to secure the future well-being of their communities. A demographically young Aboriginal population–combined with a wish to support parents pursuing education, employment, and healing–has led many communities to prioritize early childhood care and development programs.

This paper reports findings of a research study of promising practices in three groups of rural First Nations that are building integrated service models centred around early childhood care and development programs as part of their community development approach. The findings suggest a conceptual model of early childhood care and development programs as a hook for mobilizing community involvement in supporting young children and families and as a hub for meeting a range of service and social support needs of community members.

Child care and development programs in these communities include strong emphases on culture, socialization, English and heritage language proficiency, and nutrition. Co-location of child care with other services enables ready access to health monitoring and care, screening for special services and early interventions. Once parents are involved in bringing a child to a community centre-based program, many learn about and access programs for themselves and other family members. The research showed how multi-purpose, community-based service centres can become a focal point for social cohesion and can provide a cultural frame around service usage that informs external service providers and offers cultural safety for community members.

Key Words

First Nations, child development, inter-sectoral services, integrated services/integration, community wellness, community-based service delivery, child health, early childhood

INTRODUCTION

Promising innovations by First Nations communities in rural British Columbia are demonstrating the potential of early childhood care and development (ECCD) centres to serve as hubs for a range of programs and services that promote wellness, social cohesion, and cultural continuity. This paper reports findings to date of a research study to document innovations in inter-sectoral service delivery in First Na-

tions communities and, in a later phase of the research, evaluate the impacts of innovations in community-based service delivery on First Nations children's health and development and on community wellness overall.

In all of the First Nations participating in the study, the creation of inter-sectoral service centres began with a long-term goal to strengthen community capacity to provide licensed, centre-based child care pro-

grams that would improve children's safety, development, and positive cultural identity. For each First Nation, the first step toward this goal was training. They each initiated a partnership with the University of Victoria to co-deliver a bicultural, community-based, university-accredited training program in child and youth care to prepare community members to mount and operate the planned ECCD program. At the same time, each First Nation raised funding and invested capital and human resources in the design and construction of a facility for their anticipated ECCD program. Subsequently, they mounted ECCD programs guided by explicit, community-derived goals of supporting the development of the whole child and of keeping the family, community, and cultural ecologies of children clearly in focus.

What has now evolved from these foundations varies across communities because of their specific goals, resources, and geographic circumstances. In each case, there are lessons that can be learned about overcoming the challenges of working across jurisdictions, professional turfs, and regulatory spheres. There are also principles to inspire explorations by other indigenous and non-indigenous communities about the real possibilities for mounting comprehensive and accessible developmental support systems for children and families.

ABORIGINAL WAYS

Our initial assumptions about health and wellness profoundly influence how we design, implement, and evaluate systems of supports for health and development. Rich and diverse philosophical systems for understanding the nature and purpose of human life and how best to support it reside within Aboriginal communities in Canada. These knowledge systems are beginning to find their way into discussions about how to move forward to improve the health and wellness of indigenous peoples.

In British Columbia, there is a major transition underway with 82 per cent of eligible First Nations assuming control over some or all of the community health, primary health, and children's services for their members. With this shift, chronic unmet needs for training Aboriginal people in health and human services have become serious. In provincial and regional meetings of Aboriginal leaders about ways to strengthen the capacity of their communities to mount and operate new services or to take over existing services, a point repeatedly heard is that Aboriginal people want to learn from the mistakes of non-Aboriginal people. They do not want to replicate the fragmenta-

tion and inefficiencies of mainstream health care in Canada. In 2003, one of the regional inter-tribal health authorities in British Columbia met with a group of university-based researchers to discuss initiatives that could be developed that would implement the Romanow Commission Report recommendations for Aboriginal health. One Aboriginal representative commented:

Yes, we need training. But what do we want to train our people to do and to become? The transition to Aboriginal control should not mean simply Aboriginal people taking over White jobs, doing things in White ways. We want to do things in Aboriginal ways and we need training that will support our members in remembering their cultures and creating Aboriginal services that are really Aboriginal.

Aboriginal Ways as an Original Population Health Conceptual Framework

The First Nations participating in the current research and earlier training partnerships with the University of Victoria each engaged in two years of community-wide discussions about the meanings of child and family wellness within the culture and lifestyles of their own people. Across all the communities, the themes of holism, community beliefs and practices, and the importance of culture were heard again and again. Indeed, it would seem that Aboriginal ideas about how to support the survival, healthy growth, and optimal development of their own peoples have long embodied the assumptions, aims, and approaches that society is now calling population health. Non-Aboriginal and Aboriginal Peoples can learn a lot from exploring the possibilities inherent in Aboriginal ways of caring for health.

Holism

In these First Nations, child development is viewed holistically. The many aspects of a child's body, mind,

AUTHOR'S NOTE

The communities and the individuals
who participated in the research
entered into the process with the understanding
that they would remain anonymous.
They are not named in this article
at their request.

and spirit are seen as intertwined and requiring nurturing, guidance, and respect. This view permeates community decisions about what child care and development programs should entail—namely, a proactive, developmental approach to the whole child that included nutrition, preventive health, socialization, education, and Aboriginal language and culture.

Family and Community-Centred Practice

The goal of improved community conditions for children's health and development in these First Nations was seen as dependent upon the goal of supporting family wellness. Thus, it was conceived that child care and development programs should include extensive outreach to secure the active involvement of parents and others who care for children. As an Aboriginal child care practitioner in one of the communities that participated in the research said in her interview:

When a child comes back [to our centre] on Monday morning, we can usually tell how the parents are doing, and what's been happening over the weekend.

Thus, a goal of the child care and development strategies in these communities has been to provide a culturally-safe (i.e., free of racism and culturally respectful), socially-supportive centre for parents to be consulted about their children and offered opportunities to participate in the child care program, parent education and support programs, and service referrals as needed.

Community-Specificity, Not Best Practices

Effective population health strategies are not uniform. They are based on geographical, political, and cultural understandings of what health is and how to achieve it in particular populations. Given the enormous diversity among First Nations, the notion of best practices is a false hope based on over-simplified understandings. The concept itself is reminiscent of modernist ideals of truth and one-size-fits-all approaches to community development and population health. These notions contradict the understanding of health as both a process and an outcome that varies depending on population and setting. The language of best practices is foreign to a community's understanding of wellness. Communities recognize the ethics and effectiveness of grounding wellness programs in

Aboriginal knowledge, cultural concepts, socialization practices, needs, and goals of a community.

Further, the concept of population health should not be misinterpreted as promoting universal application of the same program objectives, models, and evaluation criteria for all people everywhere as has sometimes been implied. On the contrary, population health initiatives need to be based on an intimate knowledge, not only of the demographics, but also of the social conditions, circumstances, resources, and readiness of groups within the fabric of society as a whole who define themselves or can be defined as a distinct population. Thus, support for targeted programs such as Aboriginal Head Start for Aboriginal children and hot meals programs for malnourished children are consistent with a population health framework.

The First Nations that participated in the current research clearly understood this. They rejected a one-size-fits-all approach to training and the possibility of any imported best practice model that would be suitable for adoption in their communities. Instead, they sought training. They designed child care programs that would draw upon Aboriginal knowledge retained by their Elders and other community members. The programs would address the specific needs, circumstances, and goals of children and families in their communities.

These ideas were not all clearly expressed before the participating First Nations embarked on their journeys through training and service implementation. These guiding principles were only gleams in the eyes of a few community members—most conspicuously Elders—when the training programs began. Their ideas about combining and co-locating services with their child care programs were explored and debated before they were clearly defined by the end of two years of community-based training in ECCD. (The nature of this innovative approach to strengthening capacity in communities will be described later.)

Throughout the two years of capacity building, community members worked to recover, uncover, and construct understandings of child and family care and development that fit well to describe their communities; worked to explain the current health status and conditions for development of their children; and yielded insights into what needed to be done to innovate promising practices for achieving community-identified goals for improved health and well-being for all of the children in their communities. These ideas provided the conceptual foundation for subsequent development of community-based services. The

term "promising practices" is used in this paper to describe these.

Conceptual Propositions

The program of research on ECCD as a hub for inter-sectoral service delivery rests on three assumptions.

- Services appropriate to Aboriginal people should be based on the idea of child and family wellness as holistic and embedded within specific community development and health needs, goals, and cultural knowledge.
- 2. Training and services must recognize the socio-historical experiences that have negatively predisposed many Aboriginal people towards formal health, social and education services and certain cultural, financial and geographic factors that increase the likelihood of success of integrated, community-based service delivery with families as a whole.
- 3. Aboriginal communities must drive initiatives to improve Aboriginal population health and wellbeing.

THE GOAL OF INTER-SECTORAL SERVICE DELIVERY

In 2002, the Romanow Commission was appointed by the federal government to provide a status report on health care in Canada and to offer direction for the future of health care.² The resulting Romanow Report was the first national report ever to devote specific attention to Aboriginal health. The Romanow Commission concluded that the state of health and wellbeing, and the conditions of life for Aboriginal Peoples in Canada, is inexcusably low and must be addressed.

Inter-sectoral service delivery was strongly recommended by the Romanow Commission, particularly for improving the health of Aboriginal people and Canadians residing in rural and remote settings. In its report, the National Aboriginal Health Organization is quoted as submitting to the Commission that:

... one of the essential ingredients in creating effective Aboriginal health systems is a multi-jurisdictional approach to health service reform.³

Key recommendations of the Romanow Commission for improving the health of Aboriginal people include:

- Consolidate Aboriginal health funding from all sources and use the funds to support the creation of Aboriginal health partnerships to manage and organize health services for Aboriginal Peoples and promote Aboriginal health.
- Establish a clear structure and mandate for Aboriginal health partnerships to use the funding to address the specific health needs of their populations, improve access to all levels of health care services, recruit new Aboriginal health care providers, and increase training for non-Aboriginal health care providers.
- Ensure ongoing input from Aboriginal people into the direction and design of health care services in their communities.

Key recommendations of the Romanow Commission for improving the health of rural and remote populations similarly emphasize inter-jurisdictional co-ordination and pooled resources. They include the establishment of a new Rural and Remote Access Fund to support new approaches for delivering health care services and improve the health of people in rural and remote communities.

While the philosophical and practical rationale for breaking down jurisdictional boundaries and co-ordinating training and service efforts may only recently have been realized here in Canada, there is abundant international literature advocating inter-sectoral and integrated service delivery for promoting maternal health and child health, growth, and development. Unfortunately, the international literature on inspiring examples in practice is much more sparse. Chronic disappointments in moving forward on the inter-sectoral agenda in Canada and abroad can be attributed to a number of political, conceptual, and practical barriers. These include:

- the overwhelming dominance of European world views and forms of governance;
- reluctance to share authority over health care expenditures and accountability for health outcomes with communities;
- out-dated, fragmented bureaucracies;
- competing theories about the determinants of health;
- a persistent emphasis in health theory, research, and practice on the individual as the unit of analysis;
- a reliance on the western medical model to interpret health status and health care; and
- professional turf wars.

With reference to British Columbia, S. de Leeuw, J. Fiske, and M. Greenwood concluded that the frag-

mented system of social, health, and education services is the most significant barrier to population health in rural, northern, and First Nations communities.⁶

Given these substantial challenges, the innovative approaches of the First Nations participating in the current research are particularly worth examining.

CHILDREN ARE OUR FUTURE: EARLY CHILDHOOD AS A HOOK FOR COMMUNITY MOBILIZATION

There are strong arguments to give priority to ECCD as a population health initiative. In many First Nations, the reason is simply and frequently stated: Children are our future. The Meadow Lake Tribal Council in Saskatchewan, who co-developed the community-based training program in Child and Youth Care with the University of Victoria, gave the following account:

The First Nations of the Meadow Lake Tribal Council believe that a child care program developed, administered, and operated by their own people is a vital component of their vision of sustainable growth and development. It impacts every sector of their long-term plans as they prepare to enter the twenty-first century. It will be children who inherit the struggle to retain and enhance the people's culture, language and history; who continue the quest for economic progress for a better quality of life; and who move forward with a strengthened resolve to play their own destiny.⁸

Increasing numbers of First Nations in Canada identify ECCD training and services as priorities within a comprehensive vision of community development, population health, and economic advancement. ECCD is seen as essential for protecting and enhancing the physical and psychosocial health and well-being of Aboriginal children and their families. This need is particularly urgent for First Nations people living on-reserve where access to children's programs and family supports is limited by geographic distances, social and cultural barriers, and eligibility regulations. The Assembly of First Nations has long urged that caregivers be trained to deal in a culturallyappropriate manner with the large pool of First Nations children needing comprehensive care.9 Similarly, in British Columbia, an Aboriginal Committee

Report on Family and Children's Services Legislation in 1992 stated that:

Our main goals are to preserve and strengthen our culture; to support and maintain the extended family system; to promote the healthy growth and development of our children and to develop community-based programs conducive to the realization of these goals.¹⁰

ABORIGINAL DEMOGRAPHICS

The demographic numbers for Aboriginal people in Canada provide another reason to focus population health strategies on Aboriginal children and youth in a bid to improve their overall life expectancies, health status, and developmental chances. First Nations and Inuit populations are expected to grow at double the rate for the general population. Among the 700,000 First Nations people and 50,000 Inuit in Canada reported by Statistics Canada in 1998, the average age was 25.5 years. This was 10 years younger than the average age of all Canadians. The proportion of First Nations people and Inuit under five years of age is 70 per cent greater than for the general population. The First Nations and Inuit Health Branch reports that, as of 1998, there were 54,225 First Nations and Inuit children in Canada under four years of age. 11 In British Columbia, as of 2001, there were 9,573 First Nations and Inuit children under four years of age. 12 Although the national birth rate for First Nations people fell between 1979 and 1999, it remained twice the national average. Of First Nations women giving birth, 58 per cent were under 25 years of age, with 23.7 per cent being 15 to 19 years of age. As of 1999, almost one third (32 per cent) of Aboriginal children under the age of 15 years lived in a single-parent family.¹³

In British Columbia, although recently reported health data show Aboriginal health is improving alongside improvements in the health of all British Columbians, ¹⁴ significant gaps between Aboriginal and non-Aboriginal health and well-being remain. Aboriginal children are over represented on nearly every indicator of health, social, and education risk. Fifty-two per cent of Aboriginal children in British Columbia live below the poverty line. Aboriginal children are seven times more likely than non-Aboriginal children to be in government care. Between 40 and 50 per cent of children apprehended for child protection and placed in out-of-home care are Aboriginal.

A more conservative, and more frequent, argument for increased support for ECCD is that it enables more women's participation in the labour force. Indeed, the barrier First Nations parents most often cite as preventing them from obtaining or holding employment, completing their education, or undertaking employment training is the absence of child care. While child care cannot resolve the multiple reasons for low levels of employment among First Nations people, child care is generally considered a foundation of labour force attachment. In 1995, the Canadian Minister of Foreign Affairs made this argument in addressing the Assembly of First Nations Forum on Child Care:

We can't help deal with the early development needs of children and we can't respond to what is going on in the economy unless we have in this country an effective child care system.¹⁵

Research over the past 15 years has confirmed what many parents and development specialists have long known: good health, stimulation and affection in infancy, and early childhood are critical determinants of survival, growth, and development throughout one's lifespan. 16 The early years of a child's life are important across many domains of development, including physical growth, motor co-ordination, emotional health, social competence, memory and thinking skills, language, and literacy. The seeds of cultural and ethnic identity are also sewn in these early years.¹⁷ Infants and toddlers are dependent on social belonging and relationships for survival; formation of a sense of self; ability to form attachments to others; and capacity to engage in trusting, affectionate relationships characterized by empathy and mutual consideration.¹⁸ It is in these early years that a child begins to learn what it is to belong to a social group and absorbs many of the mannerisms, ways of life, values. and forms of interaction that are hallmarks of their culture.19

The First Nations participants in the current research saw that ECCD could play a central role in their consolidation as stable, healthy, cohesive, and culturally robust Aboriginal societies within the larger ecologies of life in Canada. When community leaders held forums for their members to discuss the idea of making ECCD a focal point of community capacity building and infrastructure development, the value of assuring quality care for babies and preschoolers was an easy hook for mobilizing positive community action.

ABORIGINAL CHILD CARE STRATEGY IN CANADA

Jurisdiction, and therefore funding and service for Aboriginal child care in Canada, is caught between federal responsibility for reserves and provincial jurisdiction for health and social services. At the same time, each province has its own distinct policies governing child care programs and has unique relationships with First Nations. In practical terms, this has meant that until 1995, First Nations reserves had no access to child care funds, there was no strategic plan, and there were few ECCD services. ²¹

In 1988, the federal government provided funds for the development of pilot projects to address First Nations and Inuit needs for child care. In 1989, a Report of the National Inquiry into First Nations Child Care was published. It outlined the need for an Aboriginal child care strategy.²² In 1995, the Assembly of First Nations hosted a National Forum on Child Care. This was followed in the same year by the introduction of the First Nations and Inuit Child Care Program and the Urban and Northern Aboriginal Head Start program for First Nations people living off-reserve. Aboriginal Head Start was established to help enhance child development and school readiness of Aboriginal children living in urban centres and large northern communities. By 2000, 168 Aboriginal Head Start programs were operating in 300 off-reserve communities serving about 7,000 children up to the age of six. In 1998, the Aboriginal Head Start program was announced for children and families living on-reserve.

Regulation and licensing of child care centres varies widely from province to province including whether each provincial government regulates child care services on reserves. In 1999, a legal decision was made that the Province of British Columbia could exercise provincial regulations on reserves by invitation of First Nations communities. This meant that child care facilities, whether on- or off-reserve, could opt to be licensed according to provincial standards. They would then be eligible for certain funding and other resource support. At the same time, the federally funded Aboriginal Child Care Society of British Columbia began working toward a framework for appropriate Aboriginal standards.

While 20 years ago there were virtually no licensed child care programs on reserve, there are now licensed child care programs and Aboriginal Head Start programs. In British Columbia, both programs are now eligible for operating grants—one from the province and the other from Aboriginal Head Start. The two

programs have separate training requirements with Aboriginal Head Start offering an in-house cultural training program with basic professional development in nutrition and early childhood stimulation. Child care staff in licensed facilities on reserve must include one certified Early Childhood Educator.

In 2002, federal, provincial, and territorial governments (with the exception of Quebec, which instituted universal child care in 1998) reached an agreement to improve and expand the services and programs they provide for children under six years of age and their families. The Federal/Provincial/Territorial Early Childhood Development Agreement is a long-term commitment to help young children reach their full potential and to help families and the communities in which they live to support their children.²³ The Government of Canada announced it will invest an additional \$320 million over the next five years to support and enhance the early childhood development of Aboriginal children. This new funding will be used to enhance programs such as Aboriginal Head Start and the First Nations and Inuit Child Care Initiative. It will also be used to support research on the health and developmental status of Aboriginal children and factors accounting for these developmental outcomes.²⁴

CHALLENGES IN RURAL AND REMOTE COMMUNITIES

Particular kinds of challenges face small, rural, and geographically isolated communities. The Romanow Commission report, The Future of Health Care in Canada, 25 devotes a chapter to health issues in rural Canada. It notes that rural populations are under served, at risk of poorer health, and in need of innovative models of health promotion and service delivery. The First Nations and Inuit population in Canada is spread over 800 communities (605 registered First Nations) with 77 per cent of these comprised of less than 1,000 people. Transport models of health care and specialized services for children are costly in terms of lost wages, travel and accommodation expenses, family disruptions affecting continuity of care for children, and discontinuity in the roles adults play in maintaining their community. Models of child and family support and health care that may be acceptable or effective in urban centres in Canada are frequently not acceptable nor effective in rural and remote circumstances, especially when these are compounded with significant cultural and lifestyle differences.

In British Columbia, a Report of the Northern and Rural Health Task Force²⁶ highlighted specific chal-

lenges for rural settings including: lack of qualified personnel; difficulties retaining qualified personnel; the tendency for government bureaucracies and professionals to plan health services for Aboriginal people without seeking their early and complete involvement; gaps and confusing overlaps in service provision because of overlapping federal and provincial jurisdiction; the arbitrary nature of provincial health region boundaries that often do not appropriately reflect tribal boundaries; and the need to recognize and respect Aboriginal traditions in health promotion and care.

Need for a Population Health Framework Based on Community Beliefs

In a study exploring ways to reduce risks to rural and northern children and youth due to substance abuse, S. de Leeuw, J. Fiske, and M. Greenwood noted that:

When, as is currently the case, the overwhelming focus on special needs children is on one condition [substance abuse], northern and remote communities find it difficult if not impossible to address the full range of service needs. . . . Currently, child welfare policies, women's programs and health initiatives fail to offer comprehensive approaches to meeting the unique needs of the communities.²⁷

Similar difficulties have been reported from the perspective of population health issues facing indigenous peoples in Australia:

Medical mysteries are relatively rare. The current patterns of Aboriginal morbidity and mortality can be explained . . . individual health can be profiled against key indicators such as diet, level of education, financial comfort, adequate housing, unpolluted environment and access to a range of goods and services. In Western societies this means that the richer you are, the more educated you are, the healthier you are likely to be. This stark reality is not good news for Aboriginal people whose education participation is low and for whom wealth isn't a likely possibility. . . . we need a model that acknowledges the cultural, social and emotional dimensions that impact on sickness and health. When we talk about health for any society, we must adopt the

broadest possible definition. One that considers communities as well as individuals . . . and . . . environmental health issues like sanitation, adequate sewerage systems, a clean water supply and adequate housing. ²⁸

The key message of the Romanow Commission in reference to rural and remote communities is to move toward a population health approach characterized by pooled funding and co-ordinated actions across jurisdictions. A broad scope of goals includes improving environmental conditions that will lead to health such as adequate housing, assured supplies of clean water and fresh food, and recreation, in addition to primary health services. The recommendations of the Romanow Commission provide strong support for initiatives that place child care and development of a community's children at the hub of a co-ordinated, inter-sectoral system of programs and services for children, families, and the community as whole.

PROGRAM OF RESEARCH: FOLLOW-UP CASE STUDIES

First Nations Demonstration Sites

As described earlier, three First Nations are currently partnered with a university-based team in a program of research to document and evaluate community-driven innovations in ECCD. Members of these First Nations completed two years of diploma-level course work in Child and Youth Care. Their goal was to advance community development by improving conditions for young children and their families. In a series of steps conceived as a post-secondary education and career ladder, students enrolled in this partnership program become eligible for certification by the Ministry of Health in British Columbia in Caring for Children (Basic Certification); Caring for Infants and Toddlers (Post-Basic Certification I); and Caring for Children with Special Needs (Post-Basic Certification II). All of the courses had Elders and other community resource people involved in instruction, dialogue, and learning using a community of learners approach. The curriculum is bicultural with First Nations as well as European-heritage knowledge and practice co-considered by community members.²⁹ In each community, this process has generated community-specific, culturally-grounded knowledge and ideas for moving forward with actions to support child well-being.³⁰

Evaluation research showing the unique success of this partnership program with seven other groups of First Nations has been reported elsewhere.³¹ Previous research showed that this program was more successful than any other post-secondary program in Canada in terms of Aboriginal student completion rates; community-involvement in training; incorporation of Aboriginal knowledge; revitalization of intergenerational teaching and learning; and retention of graduates in employment in their communities.³²

Table 1 shows the community capacity built in the training partnerships involving the three First Nations in the current program of follow-up research. Across the three groups of communities 40 community members enrolled in the program; 36 (90 per cent) students completed the two years of full-time course work; 30 (75 per cent) of the original enrolees are currently working in a human service capacity; and 25 (63 per cent) of the original enrolees are employed specifically in the area of ECCD in their communities.

All three First Nations that initiated and co-delivered the training partnerships have now developed community-based ECCD programs. Over time, these ECCD programs have evolved to deliver services that are new in the community; encompass services traditionally fragmented in other locations in the community using different funding sources, facilities, and personnel; and bring home services that previously had been located at some distance, often very far, beyond the community.

Each of these three communities offers insight into successful models of service delivery in communities ranging in size from 120 to 1,800 members.

Table 1: Community Capacity from Community-University Training Partnerships in Child and Youth Care

	Community 1	Community 2	Community 3
Students enrolled	10	15	15
Students graduated	8	14	14
Graduates working (full or part time)	8	10	12
Graduates working in ECCD	8	7	10

METHOD

In 2002, a research program was initiated in collaboration with three groups of First Nations partner communities with the following objectives:

- to document the evolution and elaboration of ECCD initiatives in First Nations communities located on reserves;
- to examine community-level determinants of sustainable ECCD programs that are perceived by community members as meeting the needs of children and families; and
- to assess the impacts of community-led ECCD initiatives on child development outcomes.

For the First Nations partner communities, the goal of this research is to contribute to knowledge among Aboriginal leaders about effective principles and practices for:

- engaging in partnerships with external organization such as universities, service agencies, and funding bodies:
- ensuring training and service delivery enhances rather than depletes cultural continuity and selfgovernance in communities; and
- achieving a co-ordinated strategy for supporting the health and development of Aboriginal children.

The goal of this research was to add to the understandings about the potential for positively influencing the health and development of Aboriginal children through training and funding strategies that strengthen Aboriginal community capacity to deliver ECCD. Another goal is to identify ways in which institutions and individuals outside of First Nations communities can support and serve as allies as First Nations communities develop capacity and move forward with their community development strategies. Finally, a goal of the research is to provide a context for mentoring Aboriginal researchers.³³

Thus, the three First Nations and a university-based team have embarked on a multimethod, multicomponent program of research to document, evaluate, provide feedback to community members, and share information about their explorations in ECCD as a hook and hub for promoting population health.

This research program is in its early stages. Details of the various data collection methods and findings on specific themes will be reported at a later stage. Early findings reported in this paper are derived from a series of group forums and individual interviews with a broad range of community members and external service professionals involved in the ECCD programs operating in each of the communities. Using a social participatory approach, questions for these forums and

interviews were developed with community-based research collaborators. The focus has been on community members' definitions of child health and development; their perceptions of the determinants of child health and development; their evaluation of the effectiveness of their community's approach to supporting child health and development; their own experiences with ECCD and related social service programs; and their recommendations for sustaining and improving child health and development in their community.

Collaborative information gathering to date has focused on what each community is currently doing as part of its child care and development strategy; to what extent and how these initiatives work together; how they are funded; the logistics of administration and accountability; and similar information to complete a rich description of each community's model for implementing population health strategies targeted at young children. The stage reached at the time of current writing has yielded detailed portrayals of the use of ECCD as a hub for inter-sectoral service delivery. A synopsis of these findings, focusing especially on one community, follows.

FINDINGS: THREE MODELS IN COMMUNITIES USING ECCD AS HUB

Community 1: Integrated Services

Community 1, located on a Carrier-Sekani reserve in north central British Columbia, received funding in 1996 for construction of a child care facility in a wing of the public school located on-reserve. A condition of funding for construction was that the community would also mount a training program to prepare community members to operate the child care program. The training program was completed at nearly the same time as the child care facility was completed. The graduates immediately mounted a centre-based child care and development program. Shortly thereafter, the community received funding for Aboriginal Head Start. This enabled an expansion in the numbers of children served. Both the child care and the Aboriginal Head Start programs are run by community members. Both have received excellent evaluations from the regional child care licensing officer and a Health Canada Aboriginal Head Start evaluation team.

Inter-sectoral service delivery occurs through the integration of health promotion programs on-site in

the child care centre and Aboriginal Head Start program. These include nutritious meals; preventive dental care; primary health care including immunization, vision, hearing, and speech screening; and specialist services such as supported child care for children with fetal alcohol spectrum disorder, and speech-language therapy. In addition, children who have been identified by the regional child protection worker as requiring protective intervention may be required to attend the child care program where they can be kept safe during the day and their well-being can be monitored. This is reducing the number of children placed in foster care away from the community.

Community 2: Pooled Resources

Located in northeast British Columbia, Community 2 is actually a coalition of six culturally distinct First Nations ranging in size from 120 to 600 members. These on-reserve communities joined together to acquire the funding, hire the instructors, and share facilities for the two-year training program in Child and Youth Care. Each community selected three community members to undertake the training, which was delivered in the largest community in partnership with the University of Victoria. Not all of the communities have been able to mount their own ECCD program yet. However, they are pooling funding from various sources and sharing resources. One community received funding to start an Aboriginal Head Start program, which was conceived as a Cree language immersion program. Cultural transmission is a top priority in this ECCD initiative, while school readiness is a close second priority. With only 120 community members, additional services delivered from this site are possible because of pooled funding and service agreements with neighbouring First Nations.

Each community in this group of First Nations has its own community health representative. They all share a family support worker, a wellness worker, and a public health nurse. Travelling specialists such as speech-language therapists and consultants from the child development centre in the nearest town are conveniently able to meet and monitor children attending the Aboriginal Head Start program, consult with parents and provide specialized support services as needed. The Aboriginal Head Start has thus become a hub for inter-sectoral service delivery to improve supports to a dispersed rural population of Aboriginal children and families.

Community 3: ECCD as hub in an inter-sectoral service multiplex

Community 3 is part of the group of First Nations called the Stl'atl'imx Nations. Their traditional territory spans a large mountainous region in southwestern British Columbia. The population centre of Community 3 consists of about 1,400 members, which is mid-sized among First Nations communities in rural areas in Canada. Several First Nations and other small communities are in valleys radiating out from the community so that it serves as a hub for much smaller communities.

Although the community is only three hours drive to a metropolis, difficult winter driving conditions mean that it meets Health Canada's definition of semi-isolated. Residents also identify it as semi-isolated, noting transportation as a major barrier to accessing both routine and occasional services. There is little traffic through the community. An emergency health clinic is 20 minutes from the reserve. Hospital beds are 60 minutes away, located in a small health clinic. The maternity clinic is 90 minutes away.

Child and Youth Care Training

This community initiated a partnership with the team based at the University of Victoria School of Child and Youth Care in 1997. This community was unique among the First Nations partners with the University of Victoria in that there were enough qualified community members to meet university admission criteria so the community did not need to recruit externally.

As part of a comprehensive child care strategy, the community mounted the training program at the same time they broke ground for a child care facility. The child care facility was conceptualized architecturally as part of a multiplex that has grown over time. It now houses an infant and toddler care centre, child care centre for preschool-aged children, indoor and outdoor after-school care facilities, cultural centre, health centre, social service centre, administration offices, community kitchen, and community gathering space.

In May 1999, 14 of the 15 community members who enrolled in the diploma training program were honoured in a community graduation ceremony that drew a crowd of several hundred community members. On the following day, the community celebrated the grand opening of the multiplex. The centre and the ECCD programs housed there were given Aboriginal names. The new generation of graduates form the

foundation for services for the community's young children.

As part of the training program, students undertook community consultations to plan the desired elements of the infant, toddler and preschool programs they would initiate ensuring the program was designed with the involvement and explicit needs of community members in clear focus. They also developed a manual of child care policies and procedures and learned the basic principles of administration of child care facilities and community development. Thus, within weeks of graduating from the training program, the community was ready to enrol children for the child care programs, which were soon fully subscribed. Many more children in the community have been turned away from the service due to insufficient spaces.

Culture

A cohesive group of Elders, most of whom are fluent in their Aboriginal language, actively support the ECCD staff. Intergenerational relationships are particularly easy here since many Elders played substantial roles in the ECCD training program. Staff work hard to bring many cultural activities—such as drumming, dancing, singing, and speaking their Aboriginal language—into the daily curriculum. They also involve children in seasonal activities that teach the skills that have traditionally provided sustenance for this community such as smoking and drying fish, berry picking and basket making. The children also receive advance preparation to take part in community festivals and other events throughout the year.

Culture is transmitted in less visible ways as well. At the child care centre, children come to know their relatives and they develop relationships with their extended families. Elders, staff, and parents explained that it is important to be proud of who you are. This process can begin in their community child care program where children are learning about themselves, their heritage, and their community starting with their own relations.³⁴ Also, several staff and parents identified children's opportunity to develop healthy socialization as one important outcome of having children cared for in a group setting composed of their own community members. For example, children were learning to take turns, wait for others, help others, and play with other children with whom they will share in community life for years to come.

Parents reported they were proud of the cultural knowledge and pride their children were learning. Many parents said they were learning many words and songs in their Aboriginal language from their children.

Parent Involvement

In this particular First Nation, a majority of parents bring their children to the centre for care because they are working or continuing their education on a full-time basis. A small number are using the time while their child is at the centre to pursue their own healing such as substance abuse treatment programs and other rehabilitation and support programs. As a result, there is a low level of parent involvement in the ECCD programs.

However, there is a high degree of attachment of parents to various programs and services offered at the multiplex. For example, more than 60 parents of children enrolled in the child care program have participated in one or more early language facilitation programs for parents. A registered speech-language pathologist on secondment to the community from the regional Children and Family Development office provides this service. Many parents have participated in Best Babies programs and other parent education and support programs. They have been exposed to health information displayed on bulletin boards and resource tables at the entrance to the multiplex.

Nutrition

The multiplex has a kitchen for community meals. Snacks are prepared for children attending the preschool and infant and toddler programs. Children bring their own lunch. Observing that a few children lack nutritious foods from home, staff hope to add a funded nutritious meal program in the near future.

Integrated Services

As previously described, when the multiplex centre opened, it was envisioned as a multiservice delivery site that would include Elders, youth, and children and be a site of wellness and primary health services. Programs and services, in addition to a culturally-rich, developmental ECCD curriculum, that are delivered inside the child care centre have gradually evolved to include:

- occupational therapy provided by a professional on secondment from a regional child care service;
- supported child care provided by certified child care practitioners assigned to individual children with diagnosed special needs;
- developmental monitoring, assessment and referral provided by a special needs professional assigned from a regional child care service;
- speech-language pathology services including training and consultation to staff and monitoring,

Figure 1: Early Childhood Care and Development Programs as a Hub for Inter-sectoral Service Delivery in one British Columbia First Nation

HEALTH SERVICES

- immunization, hearing, vision, and dental check ups
- infant development worker and prenatal and post-natal support
- adult support for tobacco reduction
- counselling for substance abuse

HILD PROTECTION AND FAMILY SUPPORT

- family support services
- adoption
- ourt assistance
- child protection
- foster care
- Health Education and School Readiness

 Literacy and Preliteracy

 Cultural Teachings

 Socialization
 - Elders
 - fluent indigenous language speakers
 - healing for residential school abuse
 - traditional foods, crafts, and lifestyles
 - festivals and community events

CULTURE AND INDIGENOUS LANGUAGE

- parenting play groups
- pre-literacy groups
- speech and language support
- occupational therapy
- socialization for school readiness

EARLY INTERVENTION FOR DEVELOPMENTAL SUPPORT

- Resources including facilities
- Self-governance and self-determination
- Flexible sources of funding (local, provincial, and federal)
- Local, regional, provincial, and federal networks

- diagnostic and early intervention services to children; and
- preventive dentistry provided by a denturist and the community health nurse who consult with ECCD staff on dental care, monitor children's dental health and provide referrals.

Co-Located Services

Programs and services that are delivered in the multiplex so they are co-located with the ECCD program, now include:

- Mother Goose, a pre-literacy skills enhancement program for children and their primary caregivers;
- Best Babies, a support and education group for parents of infants;
- other parenting education and support groups;
- parent information bulletin board, resource table and computer with Internet access for information search and retrieval;
- community health representative;

- support groups facilitated by community employees such as the community health representative or staff from contracted agencies such as the regional family support services non-profit agency;
- public health nurse;
- Hanen early language facilitation programs;
- National Native Alcohol and Drug Abuse Program (NNADAP) counsellor;
- meeting space for several 12-step programs (e.g., Alcoholics Anonymous, Narcotics Anonymous);
- tobacco reduction support worker;
- diabetes prevention worker; and
- optometry service.

The multiplex includes a large multipurpose gathering room. Although this room was intended initially for Elders, it quickly became a community centre for special community programs and events. There are also several other meeting rooms around the central gathering space. These are typically booked throughout the week for meetings addressing a range of aspects of child and family life.

Co-ordination with Other Community Services

Two other family-serving structures are located near the ECCD facility. These include a wellness centre that houses a child protection worker, two family support workers, the tribal police, and a large, fullservice, band-operated school.

The Foundational Role of ECCD in Communities

The evolution of community services—beginning with a partnership to deliver community-based training in Child and Youth Care and subsequent initiation of ECCD programs—was part of a considered plan for community self-sufficiency. A community administrator explained that the journey to achieving this vision began with a declaration of independence made by the hereditary chiefs of the Stl'atl'imx People in 1911.

The community cherishes goals of cultural revitalization, increased health and wellness, improved education outcomes at all levels, and economic development. The community is unified in its understanding of optimal developmental conditions for children as the foundation for achieving these goals. The child care program was planned as part of a foundation element for a comprehensive, integrated, community health centre that would proactively promote optimal health and development throughout the lifespan within a community setting infused with the community's culture and Aboriginal language.

Figure 1 shows the location of the centre-based ECCD program within an inter-sectoral service sys-

tem in the First Nation that is the focus of the current research report.

CONCLUSIONS

ECCD as a Hook and Hub for Community Renewal and Consolidation

The cases documented in this paper illustrate how, when a community begins a development process with the well-being of its children as the starting point, the focus on children can work as a hook to attract and secure community commitment and action and the ECCD program can become a hub of community-serving programs and activities. The well-being of children is a top priority for many adults in First Nations, as it is in non-Aboriginal communities. Many adults may be willing to seek services for their infant or child even though they may be reluctant to seek services for themselves. When parents or grandparents bring children for child care or drop by a child care centre for a parenting class, they are exposed to community service providers and the variety of service available through the centre. When the centre is located in their own community and it is culturally safe, the services available are both geographically and culturally accessible. This increases participation by community members in programs such as parent support groups, counselling, health education, and preventive health services as well as to cultural and community events. This in turn promotes social inclusion of children and families who may otherwise be isolated. It builds community cohesion and facilitates cultural and Aboriginal language transmission. As one young Aboriginal man in Community 3 said in his interview for the research:

Ever since this place happened, I feel like people can come out more and get the help and support they need. This child care program has been like a magnet that has drawn us together and keeps us here, doing things to help and heal ourselves and that will hopefully make our community stronger and a better place for our children and everyone who lives here and even some people who want to move back here.

The community initiatives described in this paper illustrate the three assumptions outlined initially:

1. Services appropriate to Aboriginal people should conceive of child and family wellness holistically,

as embedded within community history, conditions, development, and health;

- 2. Training and services to support the holistic, community-embedded goals of many Aboriginal communities must be based on a recognition of community members' prior experiences with health, social, and education services since colonial domination. They must also recognize the increased likelihood of success of population health approaches that involve and support the whole family and are community-based, community-operated and culturally safe; and
- Aboriginal communities whose goal is to improve health should be involved in planning, operating, and evaluating population health initiatives from the outset.

The circumstances, resources, and goals of a community combine to create certain possibilities and ways of working to promote health and well-being in a community of children and families. Each region or community faces a unique set of barriers, goals, and assets. The need for bureaucracies to recognize and support flexible program strategies and use of funding is a strong recommendation of the Romanow Commission in reference to rural, remote, and Aboriginal health.³⁵

The three groups of First Nations who participated in the research described in this paper have evolved systems of program delivery that have some commonalities and unique features. They have each used different funding sources, administrative structures, purposes, and ways of working. These distinctive features result in different kinds of benefits and achievements. But all three communities have demonstrated how using ECCD as hook and hub can assure developmental supports for children, enable primary health service delivery, and provide a portal for families to access and receive specialized services in a coordinated way.

The stories of the communities described in this paper hold promise, not only for other Aboriginal communities, but for all of Canada and beyond as well. These stories can inspire other communities to persist toward the goal of accessible, affordable, integrated, logically-cohesive, and socio-culturally suitable systems of services to promote child and family wellness.

ACKNOWLEDGMENTS

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The author thanks the three groups of First Nations communities in British Columbia who participated in the research reported in this paper and whose efforts to serve children and families provide examples for everyone. Thank you also to individual community members and service providers who were interviewed for the research. The author also expresses appreciation to Silvia Vilches who has assisted in the project.

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Further Reading

CULTURAL WORLDS OF EARLY CHILDHOOD

Edited by Martin Woodhead, Dorothy Faulkner, and Karen Littleton Routledge Falmer Education and Routledge Sport and the Open University, 1998 ISBN 0-41517-372-8 296 pages

Cultural Worlds of Early Childhood contains source material for an up-to-date study of child development as it applies to major issues in child care and education. The emphasis is on studying early childhood in cultural contexts—in families and in preschool settings.

Part 1 elaborates a socio-cultural approach to early development, taking emotional attachment, communication and language, and daycare as examples.

Part 2 considers how children's growing abilities for empathy, inter-subjectivity, and social understanding enable them to negotiate, talk about, and play out relationship themes, both in the family and preschool.

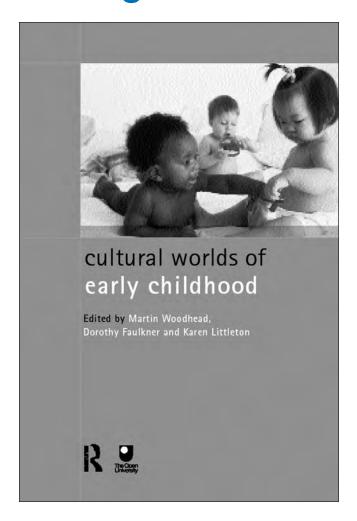
Part 3 concentrates on early learning, with chapters on the way parents support children's development of new skills, young children negotiating their role in learner-teacher relationships, and toddlers learning to collaborate with each other.

Part 4 continues the theme of children's initiation into socio-cultural practices from a cross-cultural perspective, with studies drawn from such diverse contexts as Cameroon, Guatemala, Italy, Japan, and the United States.

Cultural Worlds of Early Childhood is the first of three books that have been specially prepared as readers for the Open University MA Course: ED840 Child Development in Families, Schools, and Society.

EDITOR'S NOTE

Book abstracts are printed with permission from the publishing company that produced each book. Abstracts provide further information on some of the resources referenced in the preceding research paper or are generally related to the theme of this issue.



RECLAIMING INDIGENOUS VOICE AND VISION

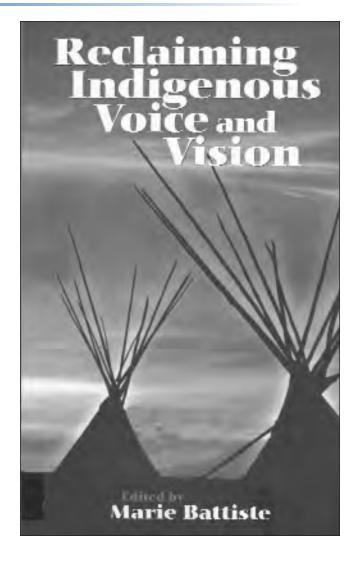
Edited by Marie Battiste University of British Columbia Press, 2000 ISBN 0-7748-0745-8 314 pages

The essays in *Reclaiming Indigenous Voice and Vision* spring from an International Summer Institute on the cultural restoration of oppressed indigenous peoples. The contributors, primarily indigenous, unravel the processes of colonization that enfolded modern society and resulted in the oppression of indigenous peoples.

The authors—among them Gregory Cajete, Erica-Irene Daes, Bonnie Duran and Eduardo Duran, James Youngblood Henderson, Linda Hogan, Leroy Little Bear, Ted Moses, Linda Tuhiwai Te Rina Smith, Graham Hingangaroa Smith, and Robert Yazzie—draw on a range of disciplines, professions, and experiences. Addressing four urgent and necessary issues—mapping colonialism, diagnosing colonialism, healing colonized indigenous peoples, and imagining post-colonial visions—they provide new frameworks for understanding how and why colonization has been so wide spread and relentless among indigenous peoples. They also envision what they would desire in a truly post-colonial context.

In moving and inspiring ways, *Reclaiming Indige*nous Voice and Vision discuss a new inclusive vision of a global and national order and detail new approaches for protecting, healing, and restoring longoppressed peoples and for respecting their cultures and languages.

Editor Marie Battiste is a Mi'kmaq educator from Potlo'tek First Nation in Nova Scotia. She is a professor in the Indian and Northern Education Program at the University of Saskatchewan. She is co-editor of First Nations Education in Canada: The Circle Unfolds.



Sheway:

Supporting Choice and Self-Determination

Maria Burglehaus, MSc, RDN, and Monica Stokl, BScN, RN, BEd

Abstract

In Canada's poorest neighbourhood, the women at Sheway access services in a way that supports self-determination and choice. The program aims to enhance resilience and well-being of women during pregnancy and in the post-natal period with support from a multidisplinary team and comprehensive services where no appointment is necessary. Sheway reduces isolation, promotes mutual support, and provides practical supports including meals and clothing. Women are supported to have positive early parenting experiences and receive support until their children are 18 months of age. The program objectives have evolved in response to an increasing number of clients and changing needs of the community. The 1999 formal evaluation documented that Sheway helps women better access pre- and postnatal care, improve their housing and nutrition, and retain custody of their children.

Keywords

Self-determination, harm reduction, multidisciplinary, drop-in, outreach, substance use, prenatal, pregnancy, parenting, infant development, resilience, maternal support, empowerment

INTRODUCTION

Given the relationship between health status and health determinants, Sheway is a policy and service demonstration of the success of addressing basic needs while providing access to a variety of services to a marginalized population of women in Canada's poorest neighbourhood.

WOMEN AND SHEWAY IN THE DOWNTOWN EASTSIDE

Benoit, Carroll, and Chaudhry¹ describe the context and nature of Vancouver's downtown eastside (DTES) and the Aboriginal population living in this community:

- 70 per cent of the Aboriginal population in Vancouver lives here;
- 40 per cent of the DTES population is Aboriginal;
- 70 per cent of the survival sex trade workers are Aboriginal women and mothers of at least one child;
- 50 per cent of Aboriginal families are headed by single mothers; and
- 80 per cent of the Aboriginal children in this urban ghetto live in poverty.

The DTES is home to Canada's first supervised injection site. It is also the neighbourhood where more than 60 women have gone missing: a local pig farmer is on trial for the murder of 15 of them.

The women of Sheway who live in this community are of childbearing age. They live in hunger, poverty, poor housing, inadequate health care, and fear and mistrust of health and social services. Many have experienced multiple losses; struggle with substance abuse; lack positive parenting experiences; and suffer with guilt, shame, and low self-esteem. The majority have been the victims of violence and child abuses. They experience difficulty accessing basic amenities on a daily basis. For example, primary sources of so-called affordable housing are slum hotels lacking basic amenities like a refrigerator, stove, and private bathroom: safety and security are chronically problematic in these accommodations.²

In the late 1980s and early 1990s, statistics from the Vancouver Health Department indicated that 29 per cent of the babies born in this area were born substance-exposed–50 per cent of these were of Aboriginal heritage. The social services ministry apprehended at least one in four infants exposed to substances in the DTES. As well, local birthing institutions were faced with a large number of women from the DTES arriving to give birth having had no prenatal care.³

Sheway was created for these women in this environment. Sheway is a Coast Salish term for growth. Sheway was created as, and remains, a communitybased pregnancy outreach program, a partnership initiative of community and government agencies. Over its 11 years, it has grown into a comprehensive, multidisciplinary health and social service program targeted to meet the complex needs of the substance using pregnant and parenting women in the community. Services are delivered through outreach and drop-in where there are no appointments necessary. Since its inception, the data has indicated that 65 to 80 per cent of the women who access Sheway are of Aboriginal ancestry.4 For an overview of the program and its services, refer to the Vancouver Native Health society website at http://www.vnhs.net.

Sheway's program model is based on the recognition that the health of women and their children is linked to the conditions of their lives and their ability to influence these conditions. This foundation is key to the way in which all services are offered and delivered. Sheway staff work in partnership with women, supporting them and the decisions they make, as well as offering information, education, and assistance as asked using a harm reduction approach.

When women enter Sheway, they have access to physician and nursing services; addictions counselling and referrals; nutritional counselling; and social workers who provide guidance, advocacy, and support for those who must navigate the financial, legal, and social systems. They also have access to a multidiciplinary service support network that includes infant development support, housing support, family support, peer counselling, alternative therapies like music and energy therapies, and traditional therapies like smudging. They can receive a hot lunch, food bags, food and milk vouchers, and bus tickets to assist with transportation to necessary appointments. The services are available throughout the prenatal period and until 18 months after the birth of the child. Sheway's environment and staff respect and reflect Aboriginal heritage and history through interactions, artwork, team composition (one-third of the team members are Aboriginal people) and the availability of traditional food. While all of these services and supports are available, it is the woman who chooses and decides which services and supports she will access through her pregnancy and into her postpartum period.

CONCEPT OF CHOICE AND SELF-DETERMINATION

This concept can be quite foreign to the women initially. Often, their personal histories and their previous experiences with service agencies have left them mistrustful and fearful. At Sheway, a woman is asked if she wishes to participate in the program and is further asked what it is that she needs. She determines her priorities: housing, food, camaraderie, health, and a change of clothes to keep up with her changing body needs through her pregnancy. The staff works to accommodate her needs and support her self-determination.

The following is a composite story of a variety of Sheway participants to describe the complex lives the women lead.

Terry grew up in a community in Northern BC and came to Vancouver with her partner four years ago when she was 17 years of age. She was pregnant with her first child and had no supports "back home." She first came to Sheway while living in a hotel in the Downtown Eastside and in need of food and housing support. She was advanced in her pregnancy and was using intravenous drugs with her partner. While at Sheway for food, she also received prenatal care from the doctors and learned she was HIV positive. The doctors and nurses worked hard with Terry and other related professionals to stabilize her drug use and to begin to manage her HIV. The Sheway team of doctors, nurses and an alcohol and drug counsellor helped her reduce her heroin use through counselling, support and education. They also helped her to get connected to Oak Tree Clinic for support on managing her HIV. As Terry coped with her recent diagnosis of HIV, she returned back to her community to get support from her family. What she found was that she was quickly stigmatized in her small rural community for having HIV and that her family and friends were not supportive. Feeling ostracized, she left. On her return to Vancouver, Terry increased her use of drugs and her relationship fell apart. She got connected back into the sex trade and was arrested. She spent the last part of her pregnancy in jail. Sheway did outreach to her in the jail. She had the baby, was released from jail and looked for drug detoxification and treatment services where she could bring her baby with her. She couldn't find this as there is only one treatment facility for mothers and children in the province and it was full with a long waiting list. At the same time the baby was found to be HIV positive and was apprehended. Several days later Terry learned that her partner had died of AIDS.

Terry continued to use heroin and spent most of her time in hangouts in the Downtown Eastside. Despite this she always stayed in contact with Sheway and would drop by on occasion for a talk, or referral to service, or some medical attention when warranted. She began a new relationship and became pregnant again. She connected with the doctors, nurses and social workers at Sheway early in her pregnancy this time and began to get medical services and other supports immediately. When taking the bus was too much for her, the outreach worker drove her to the various appointments she needed to attend. The dietitian worked with her on her diet and nutritional needs because of her pregnancy, HIV status and methadone use.

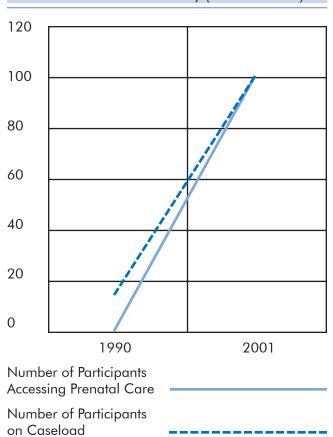
Terry started to take her AZT and vitamins regularly, and her HIV is now stable. In addition she is well connected with Oak Tree Clinic, Positive Women's Network and Positive Outlook where she is able to access more support and care. She has come in regularly to Sheway for daily hot lunches and groceries and has gained weight. She has stopped using heroin and the Sheway physicians have helped her stabilize on methadone, and manage her pregnancy and other health-related concerns. She has attended substance use treatment and continues counselling with the A&D [alcohol and drug] counsellor at Sheway. Sheway continues to provide bus tickets for her to get to other services and acts as a co-coordinator of care. She has enjoyed participating in the aboriginal crafts program offered by Sheway. She has started to envision herself as a mother and has begun to discuss with the Ministry the conditions for keeping this child. Terry has built up a relationship of trust with a Sheway physician who will be able to deliver the baby at BC Women's Hospital. The doctor and other Sheway staff have helped her devise a supportive birth and afterbirth plan. Discussions on birth control have been initiated. Terry has voiced that she is glad to know Sheway staff will visit her at the hospital and she won't be alone for the birth, and that she now has a plan for the birth and after.⁵

Sheway's success lies in the fact that the team works together in this partnership with the woman. Sheway is a proven success. It has grown from 15 clients to supporting an active caseload of 100 women at any given time. Eighty per cent of the infants born to women in the program have healthy birth weights. All of the women are receiving prenatal care–90 per cent from Sheway's physicians and nurses, the remaining 10 per cent from other health services in the community (see Figure 1).

HEALTHY BIRTH WEIGHTS AND SHEWAY PARTICIPATION

Eighty-six per cent of women who had babies while accessing services at Sheway had babies with a birth weight more than 2,500 grams (five pounds

Figure 1: Prenatal Care Access and Active Caseload at Sheway (1990 to 2001)



eight ounces). This is consistent with the significant nutritional gains made by the Sheway mothers,⁶ and compares favourably with levels of low birth weights in other areas of the city with lesser levels of poverty.⁷ In a recent review of 1,247 Sheway maternal cases and 426 Sheway infant cases, Marshall et al.⁸ identified healthy birth outcomes. There have been fewer preterm infants born to women in the program than was the case when the service opened. There has also been a drop in the incidence of low birth weight infants. However, in both instances, there has been a marked increase in the last couple of years. Marshall et al.⁹ speculate that the recent increase possibly reflects maternal stress in response to decreases in provincial funding for mothers.

Longer prenatal care and reception of food bags from Sheway are correlated with a higher infant birth weight.¹⁰

SUPPORTING WOMEN IN THEIR INTERACTIONS WITH OUTSIDE SERVICES

An evaluation completed in 2000 included a focus group in which participants described the significant positive impact of Sheway on their lives.

In the focus group, the clients described themselves when first arriving at Sheway, as both struggling with many issues and also capable of accessing help:

I was having trouble with (Ministry) workers, and trying to get things, like what I was supposed to be getting. The staff here was really helpful and was doing a lot of phoning and being an interpreter in that sense in order for a lot of single women and single parents to get things they deserve. When they were struggling trying to get it for themselves, with their workers, they made you jump through hoops like you wouldn't believe, but Sheway, they helped interpret, be that medium between the two-and that's really a good thing to have when you're just starting off and coming off your drugs and trying to become a parent again. So I think that's what happened to me. I mean, I was a parent before but I had lost both of my kids through my addiction and stuff. Because of that I was finding it hard, trying to be a mom again and to stay off drugs. The first year, of course, I struggled, I went back out a few times. But eventually I got sick and tired of being sick and tired and they got me in a (alcohol and drug treatment) program.

What brought me to Sheway when I was pregnant with my daughter is that three-month thing where you can't get on assistance because of the situation (waiting period), and I came from Kenora. And I'll never forget the first time I went to Sheway, I thought, "Oh, no, they're sending me back to Ontario, I have no food." I was seven months' pregnant, I was all scared, eh, freaking out. And okay, (Sheway said), "we'll help you the best we can." And I ended up staying at the shelter. But I know what really impressed me about them was just, you know, they were willing to help me, they didn't even know me!¹¹

WOMEN EXPRESS THAT THEY HAVE MADE POSITIVE CHANGES

In the evaluation, women talked about the most important change they made while getting help from Sheway. Below are several responses, each made by a different woman.

The self-esteem I guess, like, you know, when you're first coming off the street for the first year, it's kind of rough and Sheway's there to support you and you start getting some of your self-esteem back.

Because I know when we were using, did we have patience? No. "I want it now and I want it right now and if I can't have it right now, I'm going somewhere else to get it right now." You know, like we didn't have the patience, we didn't have the understanding of calming the baby, you know, instead of getting angry, or just trying to work through, you know, them teething and things like you just needed to learn patience for them, you know, like you just—you needed some patience and if you didn't get them, then it was like, forget it. So for me the most important thing that I've learned around here is patience.

And them talking through things with you instead of going, "Oh, well, just, don't worry about it and blah blah blah" or

something—like they asked me how to work through the situation and they got you to do most of the work on it, you know, like the talking of whatever was going on and how to work through it, rather than just giving you answers. And that helped, right? Because of course by doing that, you keep it inside, right?

For me it was listening and connecting with other parents, because they put me into AC-CESS [parenting program for young parents], they helped me so I would not be alone because I'm younger, so I guess basically they just helped me to realize that I'm not the only young parent there, kind of thing, and I could actually do it, and that basically as long as you show love to yourself and to the baby that it'll come out okay.

Being able to talk and be open with no support, you know, like you're sitting there by yourself and then going to Sheway and then with the other women there and just talking with everyone, you know, you got something in common somewhere.

To stop using drugs was the most important change.

To respect yourself.

Remember your spiritual values. Finding your real beliefs.

And don't listen to anyone who says that you can't do it—that's one big thing. I learned to value myself as a person other than just as an object, an object to go out and use men to get whatever I needed—so that's why being around all these women you know, I realized that's not all there is to life. ¹²

CURRENT CHALLENGES FOR SHEWAY AND THE WOMEN SERVED

Sheway's evaluation highlighted the need for ongoing evaluation and significant improvements to data collection. ¹³ While Sheway is consistently described as a success and a model for working with marginalized women and families, ¹⁴ the challenge to capture data representing success in key areas like child removals and addictions presents ongoing problems.

For example, current rates of removal of infants by the Ministry of Children and Family Development can include removals at birth, in the hospital, or at any point during infancy. As well, removals can be temporary or ongoing. Anecdotally, the staff is aware that the frequency of removals is less and, when a child is removed, the mother is much more involved in the decision-making processes—placing their child in care voluntarily and/or influencing decisions about placements of their child in the care of others.

Sheway strives to address the many challenges women face. Some of these issues are beyond Sheway's reach and scope of services. What adds to the situation is the increasing complexity of the lives of the women served at Sheway over the years. There has been a general increase in risk factors recorded at women's entry into Sheway. These include basic living requirements (housing, income, food), incidence of hepatitis B and C and HIV and mental illness over 10 years, as shown in Marshall et al.'s evaluation report. 15

A NEED FOR INCREASED SERVICES FOR WOMEN AND THEIR CHILDREN AGED 18 MONTHS TO FIVE YEARS

Sheway staff find it difficult to discontinue service to women at the 18-month point as there are few services for children in the 18-month to five-year period. In the words of one of the clients:

A suggestion I could give would be that if they could change their age bracket to, like, five. Once a kid gets into school, you've got the resources through the school to be able to help you, but up until they're five years old, you still need help with a lot of development things that are happening. ¹⁶

Two other programs in North America provide comparable comprehensive services to pregnant and parenting women with past or present substance use issues. Breaking the Cycle is in Toronto and supports the family until the child is five years old. The Seattle program Birth to Three is now called Parent-Child Assistance Program and provides support until the child is three years old.

Ideas for support of both parents and children in this critical period of early intervention include:

- therapeutic child care programs;
- housing programs operating as satellites to outreach, withdrawal management, and treatment programs;

- approaches to foster care that involve fostering of both mother and child; and
- a Sheway 2 drop-in model (identified by the clients) that would serve as a base for parents to access ongoing developmental assessment and programming for their children and would meet the changing needs of parents as they progress to a more stable life and parenting style.¹⁷

Sheway participants suggested: a regular art program, more formal child care while they were meeting with staff on health issues, expanded provision of food, emotional support groups, outings, and information groups for new parents. They also suggested a room to view videos and read books on parenting, help on parenting older children and children with special needs, more time to access alcohol and drug counselling, and longer term support.¹⁸

CONCLUSION

Sheway is a success as seen in participation rates and health data. Service use has risen and birth weights continue to be comparable to rates of women in communities with lower levels of poverty despite the marked increase in preterm babies and low birth weights in the last couple of years noted in the recent research. This continues to be true even as women turn to Sheway with an increase in risk factors over the past 11 years. Birth weights are higher when women participate in Sheway.

Sheway supports self-determination, giving priority to the women's right to choose her engagement with all aspects of the programming. Women then rebuild a sense of ownership of self, a sense of personal worth, self-esteem, and confidence in her ability to make decisions as a woman and as a parent.

Sheway provides the backdrop, support, and safety net that allows women to take the time to get in touch with themselves, honour themselves as mothers-tobe, explore a path not yet taken, and build the confidence to step out and onto the path with strength of spirit, body, and mind. Women report that Sheway's model is akin to more traditional services in its fluid and informal method of service and non-hierarchical relationship between the team and program participant.¹⁹

Women come to understand that, despite the challenging daily situations they face, they can hold their heads high, be proud of their pregnancies, become the parent they want to be, and be recognized for all they contribute to their families and the community.

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Further Reading

NO PLACE LIKE HOME

Building Sustainable Communities

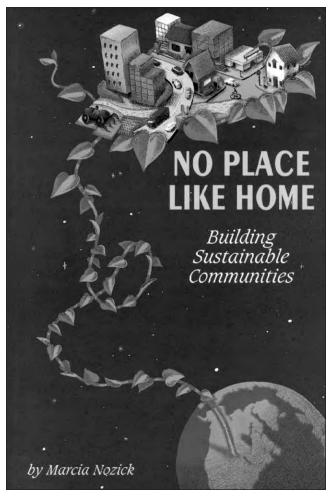
By Marcia Nozick Canadian Council on Social Development, 1992 ISBN 0-88810-415-4 237 pages

"The Holiday Inn ad tells us 'you can travel round the world and never leave home.' Home today has come to mean the wide world at large, a 'global home' which is both everywhere and nowhere. This global home we come to identify by the corporate images sold to us on mass media and repeated with regular sameness from city to city-suburbs of spaghetti design, shopping malls with glass peaks, McDonald's, Holiday Inns, domed stadiums. The shift from understanding home as a special place of origin-a community where we live, work, belong and feel a sense of responsibility-to the perception of home as a World Class City such as New York or Los Angeles is a result of complex global forces promoting cultural uniformity." So writes Marcia Nozick in a book that challenges the conventional wisdom on social and economic development.

No Place Like Home provides an alternate vision of how we can develop sustainable communities. It is both critical and constructive. It is written in language that everyone can understand. Nozick draws together five major themes, each a component of sustainable communities: economic self-reliance; ecological development; getting community control over resources; meeting individual human needs; and building a community culture. The book illustrates how these themes interact and reinforce each other in practice with lively examples drawn from communities across North America. The result is a book that cannot fail to inspire community workers everywhere

EDITOR'S NOTE

Book abstracts are printed with permission from the publishing company that produced each book. Abstracts provide further information on some of the resources referenced in the preceding research paper or are generally related to the theme of this issue.



and give researchers and urban planners much to think about.

Nozick lives in Winnipeg where she is active in urban, ecological, and community issues through her work with Greening the Forks (dedicated to saving historic lands) and the Manitoba Institute for Community Ecology. She holds a master's degree in City Planning, has taught at the University of Manitoba, and is the publisher of City Magazine, a national magazine on community and planning issues in Canada.

Find out more about what is being done to improve and promote the health and well-being of First Nations, Inuit, and Métis people.



The NAHO Bulletin is a monthly electronic publication that updates readers about the activities of the National Aboriginal Health Organization and the First Nations, Ajunnginiq (Inuit), and Métis Centres.

The NAHO Network News is a quarterly print newsletter that promotes healthy living and showcases the positive work of individuals and organization in Aboriginal Health.



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Isi Askiwan–The State of the Land:

Summary of the Prince Albert Grand Council Elders' Forum on Climate Change

Willie Ermine, MEd,

Ethicist/Researcher, Indigenous Peoples Health Research Centre, First Nations University of Canada, Ralph Nilson, PhD,

Director, Indigenous Peoples Health Research Centre, First Nations University of Canada, David Sauchyn, PhD,

Research Co-ordinator, Prairie Adaptation Research Collaborative, University of Regina, Ernest Sauve,

Director of Health and Social Development, Prince Albert Grand Council, and Robin Yvonne Smith, MA,

Community Research Facilitator, Indigenous Peoples Health Research Centre, First Nations University of Canada

Abstract

First Nations perspectives about the natural world can enhance western scientific research and understanding of the impacts of climate change on quality of life and community health. The Elders bring the collective wisdom of countless generations living in particular geographic locations, adding considerable depth to the view of climate change and human adaptation. Elders and other First Nations knowledge holders from the Prince Albert Grand Council area in Saskatchewan came together to discuss the impacts of climate change on population health within their traditional territories. This knowledge was shared within the context of an Elders' forum, organized by the Prince Albert Grand Council Department of Health and Social Development, the Indigenous Peoples' Health Research Centre of the First Nations University of Canada, and the Prairie Adaptation Research Collaborative. The primary objective in hosting this event was to create an open forum based on respectful learning and traditional protocols in which Elders could share information about climate change with one another and with members of the scientific community. This paper highlights the Elders' forum as a culturally-appropriate method for knowledge sharing and transfer. The paper describes the unique perspectives offered by the Elders. Some of the major themes that emerged from the forum are discussed, notably the important connection that the Elders made between the state of the natural and social environments in their home communities. This information is placed within the broader context of the growing literature on traditional environmental knowledge.

Key Words

Climate change, environmental impact, First Nations, Elders, Prince Albert Grand Council, traditional environmental knowledge (TEK), western science, population health, quality of life, community-based research

INTRODUCTION

The issues and implications of climate change, particularly global warming, have moved beyond the academic sphere and have entered the public consciousness as real and pressing concerns.¹ For many years, scientists have been tracking trends in temperatures and precipitation levels to try to understand the

nature and degree of change we are experiencing in our climate and the implications of these changes for the future.²

The scientists of the First Nations communities the Elders—have also been tracking these changes within their traditional territories. The Elders recently came together in Prince Albert, Sask., to share their observations and insights with each other and with members of the academic community. From Feb. 3 to 5, 2004, more than 30 Elders from the 12 First Nations that comprise the Prince Albert Grand Council (PAGC) attended an Elders' forum entitled Isi Askiwan—The State of the Land. This forum was organized by the PAGC Department of Health and Social Development in co-operation with the Indigenous Peoples' Health Research Centre (IPHRC) of the First Nations University of Canada and the Prairie Adaptation Research Collaborative (PARC), a climate change research unit based at the University of Regina.

The purpose of this paper is to highlight the contribution of the Elders and other traditional knowledge holders to the discussion of the impacts of climate change on population health. It is argued that First Nations perspectives of the natural world can enhance western scientific research and understanding about the natural forces of climate change. This holds true regardless of whether First Nations observations and knowledge of the environment agree with western scientific data and findings (providing confirmation and/or clarification) or appear to contradict those findings (pointing out possible flaws or shortfalls in scientific data collection or suggesting an alternate foundation for knowledge and conclusions).³ The Elders' forum was an appropriate and important venue for documenting this knowledge and for developing a better understanding of the relationship between healthy communities and healthy environments. Elders can share the collective wisdom of countless generations living in particular geographic locations, adding considerable depth to society's view of climate change and human adaptation. The format of the Elders' forum will be explored and placed within the broader context of the growing literature on traditional environmental knowledge. In addition, this paper will highlight some of the major themes that emerged from the forum and will explore the unique perspective offered by the Elders.

METHODS

In recent years, the PAGC in Saskatchewan has been developing a format for bringing together Elders from the PAGC communities so the Elders' voices and knowledge may be focused on important issues such as health, wellness, and education. The PAGC hosted three such Elders' forums between 2001 and 2003. The February 2004 forum on climate change was an expansion of this format. Rather than being an internal process to inform PAGC policies and initiatives this process was aimed at informing public pol-

icy on an issue PAGC and the broader Canadian society have identified as significant—that of climate change. The primary objective in hosting this event was to create an open forum based on respectful learning and traditional protocols in which Elders from the PAGC area could share information about climate change with one another and with members of the scientific community. A secondary objective in hosting this forum was to develop a positive working relationship between the PAGC, the IPHRC, and the PARC. In addition, the forum aimed to raise awareness at the community level around issues of climate change.

The Elders' forum was semi-structured⁴ and focused on three questions that were provided to the Elders six weeks in advance:

- 1. What has been experienced or observed by the Elders in regards to climate change?
- 2. What have been the impacts of these changes on the health and quality of life of First Nations communities?
- 3. What is the capacity of communities to adapt to these changes, both in the past and in the future?

To explore these issues, a First Nations traditional learning tool-an Elders' forum-was identified as the most appropriate methodology. This method was chosen, not only because of the solid foundation laid by previous PAGC initiatives, but also in recognition of a number of important benefits. First, by following traditional protocols and incorporating cultural events, the Elders' forum provided an appropriate setting in which the Elders could share their information. Second, the forum brought together knowledgeable Elders from a wide range of geographically and culturally diverse First Nations. These ranged from Cree and Dakota communities occupying the transitional zone between the parklands and boreal forest to Dene communities located in the northernmost regions of the province. Third, this format allowed information to be shared among communities as well as between First Nations and academic people. Finally, the Elders' forum provided a foundation for future initiatives such as focused case studies and/or further development of the Elders' forum as determined by the interests of the Elders.

According to protocols established in previous PAGC Elders' forums, the elected Chiefs of the individual First Nations within the PAGC were asked to nominate two Elders from their communities to attend the gathering. The two largest First Nations within the PAGC, Lac La Ronge Indian Band and Peter Ballantyne Cree Nation, were asked to nominate three Elders to better reflect the diversity of their multiple

communities. All costs for the Elder delegates—including honoraria, travel costs, hotel accommodations, and meals—were covered by funds received from PARC to host this event. Four additional Elders were invited to conduct the ceremonial aspects of the gathering, such as the pipe ceremonies that were held each day, and implement the necessary protocols for the transfer of knowledge. Other support personnel for the Elders' forum included a master of ceremonies, two translators (one Cree and one Dene), and four facilitators to direct the sector group discussions.

The physical format of the Elders' forum incorporated a central table around which all the Elders gathered for initial discussions and presentations. Simultaneous translation was provided at the central table between Cree, Dene, and English. For one of the afternoon sessions, the Elders broke into smaller discussion groups to talk about the issues in more depth. These discussion groups were based on four sectors identified by the PAGC—the Plains Cree/Dakota, Swampy Cree, Woodlands Cree, and Dene. Each of these sector groups had a facilitator fluent in the dialect of the group. This allowed Elders the opportunity to talk freely in their First Nations languages. Summaries from these small discussion groups were then shared at the central table.

The Elders' forum was based on a spiritual foundation of daily pipe ceremonies, prayers, songs, and a traditional feast and giveaway for the Elder delegates.

The Elders' forum was open to the public in general, in particular to staff and students of the First Nations University of Canada, staff of the PAGC, members of PAGC communities, and PARC members. The forum was also open to the media. It received coverage from the Missinipe Broadcasting Corporation of Northern Saskatchewan and the *PAGC Tribune*.

RESULTS

The Elders' forum produced results on a number of different levels. Specific information was shared about the changes in climate and environment observed by Elders in their traditional territories. Audio and video recordings from the Elders' forum are being translated and transcribed. A detailed analysis of this information will be contained in a final report. Although a detailed analysis is premature at this point, this paper identifies a number of broad themes that emerged from the gathering. The primary themes include: the connection between the natural and social environment, specific concerns about environmental impacts of industrial development in PAGC traditional territory, and a variety of other themes relating

to environmental health. This paper is a preliminary analysis only. The following overview does not include individual statements or quotes from the Elders. These will not be available until the full translation and transcription of the recordings has been completed.

Connections Between the Natural and Social Environment

Through the discussions at the forum, the Elders emphasized the connections between the natural and social environments. Simply stated, the natural environment is the foundation for the social environment. According to the Elders, this link is most clearly expressed in the idea of community. The community is important because of its role as trustee and guardian for the collective tribal knowledge in the form of custom and culture. In each of the Elders' communities. the older generation holds the stories of the people and relates the narratives and teachings of good thought and action to the children. The Elders tell the children how the world and their people came to be and what it means to be part of the community. Community life revolves around the rhythms and patterns of the natural environment. Values, language, and the other assorted components of culture are taught within this natural setting. Traditional ways, songs, ceremonies, and insights of First Nations science are tied to the use of the land. The description and deeper understanding of those processes are embedded within the language. This knowledge traditionally held the community together as an integrated whole. It moulded the norms and collective cultural codes that explained how people should live and act within their natural and social environments. At the forum, the Elders spoke of these relationships and what it means to be a good human being.

For many of the Elders, their own learning process—and subsequently their beliefs about the continuity of their community's ordered existence—was inherently rooted in the land and environment of their traditional territories. The natural environment was the setting in which the transmission of culture and values took place as they learned while out on the land with their own Elders and teachers. The community codes that protect and maintain the language, cultural norms, and the collective spirit of the people represents the combination of many people's experiences and knowledge about learning and living off the land. This kind of background allowed the people to collectively negotiate the future and to adapt to the changing circumstances imposed by time. Therefore, the

natural environment is the framework for maintaining the continuity of the social environment. One is necessarily impacted by and reflected in the other.

The Elders at the forum emphasized their own understandings about what makes healthy individuals and communities. They stated that the continued health of their communities is rooted in their relationships with the land and natural environment. The Elders clearly see the importance of sustaining connections to the land and environment as a foundation for maintaining cultural continuity and integrity. The sentiment expressed at the forum was that the movement away from these natural settings and the subsequent shift in philosophy to the mainstream urban lifestyle affects the continuity of population health and cultural stability within their communities. The full impact of this shift in consciousness on the future generations is a distressing prospect for the Elders. There was a concern not only about cultural continuity and environmental integrity with modern advances, but also with the way in which these changes have impacted the community. The common refrain of the Elders was that youth no longer have ties to the land because of various influences. They attributed this disconnection with the land to the disconnection and alienation with their cultural roots. Similarly, when the people become disconnected from the land, the lines of communication between the natural and social worlds are severed and they have less influence on a depersonalized universe.

The Elders challenged themselves to take ownership and act upon the conditions that would allow youth to reconnect with their natural environments. For the Elders, the shift of consciousness within their communities, particularly by the youth, affects the overall health of the population in more practical ways as well. Connections to the land traditionally meant that the natural environment provided for an array of health needs including clean air and water, natural foods, medicinal plants, and spiritual grounding.

The Elders shared concerns that the shift in diet from natural foods to consumer products off the store shelves has consequences in all areas of a person's health. Not only was the process of living with nature and extracting a living from its products important for their physical and dietary needs, but also meaningful for their spiritual well-being. Thus, the Elders tracked the parallel paths of the impacts of climate change and other industrial activities and the impacts experienced in the social environment with the urban mentality advancing into northern territories.

The Elders' perspective concerning the state of the land, or *isi askiwan*, is rooted to their concerns with the community and particularly with the state of the youth. The Elders have attached or co-related the sensitive nature of the living land and environment to the degree of connection the people maintain with their land roots. Gregory Cajete states that:

. . . creative use of the environment guaranteed its continuity, and Indigenous people understood the importance of allowing their land its rich life because they believed their land understood the value of using humans. If humans could use the land, the land would also use them to enrich it and keep it alive. They and the place they lived were equal partners in life.⁵

The Elders' role in maintaining cultural continuity, and in particular the ability to communicate the importance of maintaining respectful and on-going relationships with the land to the youth, is parallel to the degree of response a community can expect from the environment. The Elders see a sacred responsibility to uphold a culture that is tied to the land. The practical fulfillment of that vision, by seeing communities becoming strong and vibrant from their connectedness to the land, would serve as a model for others to follow in maintaining ecological integrity.

Environmental Impacts of Industrial Development

The Elders discussed matters that they felt were outside of their immediate jurisdiction and influence. The Elders shared a number of concerns about industrial activities and their impacts on the environment of traditional territories. Industrial activities such as mining and clear cutting of forests, along with other forms of industrial pollution, were mentioned as contributing factors to the destruction of the environment. In particular, Elders shared concerns about the quality and quantity of water in their territories and the state of the forest ecosystems. With respect to the latter, a number of Elders were concerned with the decreasing abundance of plant species used for traditional purposes.

Elders at the forum made a clear and passionate connection between industrial activities and the impacts they have on the natural and social environments of their home communities. To a certain degree, climate change may be considered a natural process as the Earth's climate has always changed and gone

through cycles as evidenced in the natural history available to us. However, present concerns stem from the degree to which human activities are altering or accelerating these natural rhythms to a point where the impacts become unpredictable or impossible to absorb. These concerns are shared by Elders and western scientists alike.⁶ For the Elders, the idea of human impacts on the environment is clearly seen in the way industrial activities are disrupting the natural environments in their territories. These industrial activities and their impacts are particularly distressing because of the personal relationships the Elders have with their lands. For the Elders, the land, and indeed the universe, is alive and therefore must be approached in a personal manner. First Nations Elders and spiritual people meditate about the relations between individuality, the natural world, and the mysterious life force that permeates creation. The transmission of these insights benefits the community as a whole. For many of the people connected with the land, maintaining relationships with the natural world is part of their being and contributes to the way they understand and associate with the environment. Any harm done to the land and water that contributes to their livelihood is a personal assault to their existence.

The Elders at the forum linked the natural environment, as the natural background of human thought and society, with human responsibility for the maintenance of that perspective and order. How well society understands and acts upon the human-nature relationship may have a bearing on how much it can come to grips with issues of climate change. The Elders said keeping the integrity of those natural environments calls for society's increased awareness about the links between human action and its capacity to influence the environment. As a partnership in the forum, the Elders challenged each other, the western scientific community, and society at large to adopt a consciousness about the living natural world and to recommit to personal relationships and efforts to understand its natural rhythms and patterns.

Other Themes Relating to Environmental Health

A number of other themes will likely emerge as the authors continue to analysize the data from the forum. The topics addressed by the Elders include observed changes in weather patterns and precipitation levels and changes in bird and wildlife populations, particularly in the most northern regions of the province. These themes, and their relation to environmental health, will be fully explored in the final report on the

forum, which is due for completion in March 2005. As a preliminary example, the authors will briefly profile one topic—that of water quality and quantity—and provide some initial analysis in terms of the broad themes already identified.

One of the three questions the Elders addressed was about the changes they had experienced and observed in their traditional territories. A recurring observation, though one that took on specific characteristics in particular geographic locations, was around the quality and quantity of water in their territories. This topic was mentioned by Elders from all four of the PAGC sectors (PlainsCree/Dakota, Swampy Cree Woodland Cree, and Dene) in terms of its impact on their livelihoods. It was often mentioned in relation to industrial activities in their territories. For example, Elders living near Saskatchewan's border with Manitoba expressed concerns about the pollution from industrial activity along the border. They noted changes in the taste and quality of their water. They were concerned with the impacts of pollution on the lakes and fisheries in their area. Dene Elders from northern Saskatchewan were concerned about the impacts of mining activities on water quality. Elders living along the Saskatchewan River noted that the river was traditionally the source of livelihood for their communities, but that the river was now polluted from run-off from farming and the results of deforestation.

The Elders emphasized that water is the source of life for all living things. Yet, human activity is seriously impacting the availability and quality of that water. Climate change, also accelerated by human activities, was also seen as impacting water supplies. Changes in precipitation had resulted in decreased and fluctuating water levels. There was a strong sentiment expressed by the Elders that it was their responsibility to keep and protect the land for future generations, but that society as a whole would have to re-establish its priorities and respectful attitudes towards the land to bring things back into balance. Thus, the connection was drawn again with the social environment, as the framework for human industrial activity, being inherently tied to the natural environment.

DISCUSSION

Traditional Ecological Knowledge

Increasingly, western scientists and academics are recognizing the importance and value of the traditional ecological knowledge (TEK) held by Elders and other members of Aboriginal communities. TEK has been defined as:

... a body of knowledge built up by a group of people through generations of living in close contact with nature. It includes a system of classification, a set of empirical observations about the local environment, and a system of management that governs resource use.⁷

The word "traditional" does not imply static. Like any other knowledge system, TEK is dynamic and constantly evolving through new experiences and observations.⁸

Western science and TEK are often viewed as two contrasting knowledge systems. In this comparison, western science is characterized as tending to reduce and simplify complex systems, to focus on numbers and data, and to consider natural systems as frozen in time and removed from any social framework. In contrast, TEK is described as holistic, descriptive, and connected to long-term timeframes and specific cultural settings. While this comparison may provide some basis for general understanding, it simplifies the nature of both knowledge systems. The term "western science" encompasses a broad range of theoretical and methodological approaches. These approaches can strive for holistic and long-term understandings, as in the case of ecology, and may be directed towards specific social goals, as in the case of conservation biology. In turn, TEK may include quantitative observations and generalized understandings environmental processes.

Some of the earliest studies on TEK in Canada took place with Inuit communities in the Arctic. They were directed towards documenting traditional land use and occupancy to support land claim negotiations. These studies brought to the forefront the extensive knowledge held by Inuit communities about their traditional territories. They provided the foundation for the growing literature on the application of TEK to the management of resources and the development of co-management regimes, 10 environmental impact assessments, 11 conservation and sustainable development, 12 and environmental history. 13

More recently, as the issue of climate change has become a growing concern, Aboriginal people, and Elders in particular, have begun to add their voices and observations to the body of knowledge about this issue. This has particularly been the case in northern regions where livelihood activities often remain tied to the land. For example, in 1999 the International Institute for Sustainable Development in Winnipeg undertook a project in partnership with the Inuvialuit

community of Sachs Harbour in the Northwest Territories to record Inuit observations on climate change. 14 In March 2001, the Nunavut Tunngavik Incorporated hosted a two-day workshop in Cambridge Bay bringing together Inuit Elders and hunters from the region to discuss climate change issues. ¹⁵ In 2003, the Department of Resources, Wildlife and Economic Development of the Northwest Territories attended the Dene Nation Elders Gathering in Rae-Edzo to initiate discussions on climate change and develop a series of regional workshops with Elders around this issue. 16 Further south, the Model Forest Association hosted a workshop on climate change at the Little Black River First Nation Community Hall in Manitoba in January 2003.¹⁷ All of these initiatives point to the growing need for collaboration between western scientists and Aboriginal communities to understand and address climate change issues. The PAGC Elders' forum on climate change is one contribution to this process.

The Elder Perspective

Moving beyond the academic discussion on TEK to a deeper level, more reflective of community realities, requires a thoughtful consideration of the location from which the Elders' voice comes. The First Nations world view, as represented by the Elders, is formed and guided by a distinct history, knowledge, tradition, values, and interests as well as social, economic, and political realities.

There are other important differences between First Nations and western knowledge systems beyond culture. The value of the Elder perspective is in their ability to relate to climate change as a broader process that goes beyond the facts and figures of academic study. The fundamental value of including the Elders' perspectives into the discussion about climate change and population health is their unique experience and knowledge base with the natural environment. Many of the Elders' lifestyles are tightly connected to the natural environment through trapping, hunting, fishing, and other means of northern livelihood. This experience is a way of life and a way of knowing and understanding. The First Nations knowledge system and world view attaches significance to the relationships between humanity, community, ecology, and the supernatural. These relationships allow an opportunity, perhaps one not fully understood or appreciated by western society, for Elders and other First Nations knowledge holders to establish intimate and personal relationships with the living forces that surround their communities. As David Suzuki and Peter Knudtson state:

... from this attitude of respect, gratitude and humility, aboriginal people have acquired an understanding of their 'relatives' that is far more extensive than the unidimensional kind of information that is gleaned by scientists.¹⁸

In turn, these foundational philosophies and practices teach that existence is a subjective experience of the world. The attachment to the land provides the grounding necessary to speak meaningfully about these relationships. The First Nations perspective suggests the possibility of influencing forces beyond the physical reality of the world through these personal relationships with the land and environment. The fundamental insight is that all existence is connected and that the whole encompasses and includes the individual. Joseph Couture has described this immanence as "the pervasive, encompassing reality of the life force, manifest in laws—the laws of nature, the laws of energy, or the laws of light." ¹⁹

The insight of the Elders is the awareness and natural intelligence of the universal forces. The plants, animals, rocks, elements, and everything in nature, including humans, exhibit an intelligence that is perceptible to Elders as the scientists of First Nations communities. Dividing the universe up into living and non-living things has no meaning in this context. First Nations knowledge contains the idea that even a rock is in some way alive because life and intelligence are present not only in all of matter, but also in energy, space, time, and the fabric of the entire universe. The Elders understand that coming to grips with issues of climate change would entail discussion around perspectives of the living environment. Cajete states that:

[First Nations] perceived multiple realities in Nature–that experienced by our five senses was only one of many possibilities. In such a perceived "multiverse," knowledge could be received directly from the animals, plants, and other living and non-living entities . . . All life and nature have a "personhood," a sense of purpose and inherent meaning that is expressed in many ways and at all times.²⁰

Elders' perceptions of the natural environment are important in understanding the complex array of challenging questions presented by global climate change. The Elders believe that by understanding the spiritual world, society can more fully understand the natural world. With this understanding, knowing becomes possible. Peggy Beck and Anna Walters state:

... a knowledgeable human being was one who was sensitive to his/her surroundings. This sensitivity opened him/her to the Grand mysteries and to the possibility of mystical experiences, which was considered the only way to grasp certain intangible laws of the universe.²¹

This fundamental principle of First Nations thought is often discounted in western scientific circles. However, understanding its value can lead to insights about climate change and many other important issues. As Jeremy Hayward has stated, "it is just that the modern description leaves out so much–it leaves out the sacredness, the livingness, the soul of the world."²²

Cross-Cultural Ethics

Careful and thoughtful work is needed to bring different knowledge traditions together on common issues such as environmental change and health. It is important that the difference between the First Nations and western knowledge systems be clearly defined as the beginning of this discussion as a backdrop. Cajete cautions that

Western and Native science traditions are very different in terms of the ways in which people come to know, the ways in which knowledge or understanding is shared, how knowledge is transferred from one generation to another, and how knowledge is handled legally, economically, and spiritually.²³

This distinction will provide some perspective to the different views and approaches taken relative to the issue of climate change.

As much as western knowledge gathering is guided by principles of knowledge production and reproduction, the First Nations knowledge tradition similarly operates under a set of guidelines or protocols. The Elders' forum is presumed to operate under the protocols of the participant First Nations. The Elders forum, as a methodology, continues to be developed by the authors in conjunction with the PAGC. Discussions are continuing around the format and the sharing of information from the forum. The Elders themselves suggested a number of possible improvements to the format. For example, holding the forum in a community setting (rather than in an urban centre) would mean that children and youth could be more actively involved. Holding the forum in an outdoors

setting would be more in keeping with traditional practices. The development of the forum is guided by principles of ownership, control, access, and protection²⁴ of information where intellectual property rights are weighted to the advantage of the Elders.

Philosophically speaking, the Elders' forum, as a methodology, does not need validation from any other knowledge institution nor is it presumed that the western conventions of knowledge production apply in the First Nations' cultural context. While it may overlap to some degree with qualitative research methods in the social sciences (such as oral history research, participatory action research, and other methods being developed in the field of TEK studies), it takes its ultimate authority and validation from First Nations cultural traditions and protocols for knowledge production and transfer.

For the Elders, the gathering format is a traditional learning process that is a central feature of First Nations knowledge systems. It is important for the centre of control to remain with First Nations communities. This was demonstrated in practical terms, for example, in the alteration of the PAGC Elders forum agenda according to the wishes of the participant Elders. Such a gathering creates a forum for cultural and social exchange between experienced and knowledgeable people within their own traditional setting. As such, it is helpful in bringing about the re-establishment of a First Nations institution. The Elders are scholars in their own right within the First Nations knowledge system. A primary goal of the Elders forum is to provide supportive conditions for that knowledge system to function and flourish. These conditions include spiritual and cultural observances, open dialogue, and appropriate technology for the use of First Nations languages. As Roberto Unger has stated, if an environment allows people to move within it to discover everything about the world freely, it is a natural setting. If the environment does not allow such movement, it is artificial.²⁵

The Elders' forum relies on the direction and contribution of leaders within First Nations communities. It cannot be created solely within the academic sphere. This was demonstrated in the Elders' forum on climate change where leadership from the PAGC, individual communities, and the Elders organized the necessary cultural and political resources to achieve the objectives of the forum. From this position of leadership, the Elders were positive about sharing the results of the gathering so that it could benefit society as a whole–provided, however, that the communities ultimately retain ownership of the information.

Conciliation of First Nations and Western Knowledge

An interesting feature of the Elders' forum was the inclusion of a presentation by the PARC research coordinator. The presentation gave the western scientific perspective on climate change and shared information on climate change in Saskatchewan. This sparked a lively exchange between Elders and researchers. It provided them with a rare opportunity to ask questions of one another and share observations. The presentation showed how scientists have determined that the climate is always changing, that the current rate of climate change is unusually rapid, and that the impacts observed by the Elders (such as falling lake levels) agree with the results of global climate modeling. The principle of objectivity and the array of quantitative data produced by the scientific method were compared with the Elders' perspective of a participatory mind towards the issue of climate change. The scientific perspective detailed the data collection process and the time span of climate change knowledge going back thousands of years using modern technology to analyze tree rings and sediment samples. The information presented from this perspective complemented the observations of the Elders who responded to the issue of climate change through their experience with nature. They emphasized the effects of change impacting the health and quality of life of their communities at the personal level. The Elders painted a picture of personal relationships to their environment and their dependency on it. It became increasingly apparent that for the Elders it is the experience of observing that is important and not just the observation itself.

The Elders' forum attempted to reconcile how academics and Elders can work together and how cultural knowledge traditions, guided by differing world views, can co-operate and form partnerships in the pursuit of knowledge. As noted by Henry Huntington and others, although there is widespread recognition of the value of incorporating traditional knowledge in environmental studies, little attention has been paid to the actual process of how holders of traditional and scientific knowledge can effectively communicate with one another to share information.²⁶ The forum provided the opportunity to bring together different groups. It highlighted the possibilities of advancing knowledge in pursuit of a common goal. An important question to grapple with is how the two knowledge systems can work together in an ethical manner from a place where both traditions are respected. As Cajete suggests:

... a crucial first step in making the dialogue and its effects truly authentic and practical would be for the Western scientific establishment to validate the study of Indigenous science.²⁷

In the view of the authors, the latter does not need external validation. However, the respectful recognition of its validity by western scientists does open the way for a dialogue that will benefit both sides.

The academic writers who are linked to the Elders' forum are perceived as *oskapiwis*—a Cree word which translates loosely as "servant"—to the First Nations knowledge system. They are expected to perform their skills and duties under the support and direction of that system. The intellectual study of the oral tradition is enhanced by the cross-cultural dialogue of the Elders' forum. Western understanding is enhanced by the alternate perspectives presented by the Elders and by the work of the *oskapiwis* to facilitate the dialogue between First Nations and western world views. In this respect, the facilitators, academics, and writers associated with the Elders forum need to work from a position that is reflective and respectful of both systems.

In the same vein, equality is necessary in building a mutually beneficial relationship. This kind of work must be carefully crafted to foster a mutual appreciation for working together and to pave the way for future endeavours. The Elders' forum described in this paper initiated an exchange, a discussion between the First Nations and western community regarding the importance of knowledge from different perspectives. It is conceivable that the First Nations community can respect western scientists for the work they do. It is also logical to assume that scientists in turn can learn to see themselves less as observers and more as experiencers. Indeed, this was demonstrated through the respectful exchanges at the Elders' forum. Both the Elders and the western scientists approached the forum with open minds and with respect for the information presented by the other. As Michael Talbot has said about scientific understanding, "a shift from objectivity to participation will also most assuredly affect the role of the [western] scientist."²⁸

The Elders' forum helped bring together traditional environmental knowledge and western scientific understanding in attempts to understand the complexity of climate change. The two knowledge systems are different and often do not understand each other. As a result, they have not worked together to address issues such as global climate change. The lack of under-

standing between western science and First Nations knowledge continues to persist. However, as David Peat suggests, "science is about understanding; it is one of the ways we attempt to answer the perennial questions about the nature of existence." This definition of science has some resonance with First Nations perspectives and world views. It suggests a common ground on which to build a relationship.

Solutions and Key Players

The benefits of incorporating traditional knowledge into studies on climate change have been documented by a number of authors. For example, Patricia Langley Cochrane and Alyson L. Geller point out that Alaska Natives observed changes in weather patterns and thinning sea ice long before scientific studies in the region confirmed these observations.³⁰ A clear benefit in incorporating traditional knowledge is to highlight these early warnings of environmental change and direct research to key areas. Fikret Berkes and Dyanna Jolly have suggested that it is important to consider issues of resilience and adaptation to a changing environment. Such lessons can be learned from First Nations communities that have adapted and responded.³¹ As global warming is a proven and progressing phenomenon, it will be necessary for human populations to adapt to, as well as attempt to lessen the impacts of, changing environments. Berkes and Jolly provide examples of adaptive strategies used by the Inuvialuit community of Sachs Harbour to cope with a changing Arctic environment. They highlight the importance of traditional knowledge, both in terms of understanding what is happening on the land and in developing adaptive responses rooted in specific cultural contexts.

As noted already, the Elders at the PAGC Elders forum clearly recognized a need for changing the status quo-in terms of revitalizing the relationship between people and the land-as a way of addressing climate change and other environmental issues. However, the Elders decided by consensus at the forum that their role was not a political one. They purposely refrained from making resolutions and formal recommendations. The Elders identified that their role in response to the current situation was to strengthen their own local communities and cultural connections to the land, particularly through working with the youth. By implication, it is the role of western scientists, and in particular those present at the Elders' forum, to share the information from the forum to the broader society and to decision-makers as a way of motivating and influencing change in the western sphere.

CONCLUSION

The purpose of the gathering in Prince Albert was to draw on the knowledge and experience of First Nations Elders regarding climate change on the prairies and human adaptation to these changes as well as to share information between Elders and scientists in a collective effort to address the issues of climate change. The significance and benefits of the Elders' forum may be seen to flow from the process of the gathering as well as from the products, or end results. The development of the Elders' forum, within the PAGC and in collaboration with IPHRC at the First Nations University of Canada, provides a strategic venue for First Nations knowledge and in particular Elders' discussion and its distribution. The Elders' experience and wisdom is a vital ingredient in the fabric of First Nations communities. It is important for their voices to be heard and reasserted in that context. Such a gathering of Elders might be described as a think tank or a great library of knowledge and history in the revitalization of First Nations communities and for the mainstream understanding of First Nations values through knowledge translation and transfer. The Elders' forum is conceived as a methodology that brings out cultural norms and understandings from the Elders' perspective. The knowledge of the Elders comes from an oral tradition that is firmly set in the context of First Nations languages and the natural environment. The Elders forum provides a venue to access this knowledge, facilitated by oskapiwisahk who are knowledgeable about both western and First Nations knowledge traditions.

This important source of information has the potential to significantly add to scientific and public understanding of both the history of climate change on the prairies and the strategies used by communities-past, present, and future-to adapt to these changes. One of the most significant features of the Elders' forum, bevond the collection of information specific to climate change and mechanisms for adapting to change, is the empowerment of Elders and community voices in matters of population health and public policy. At another level, the forum highlighted the way communities can engage in issues of population health. To date, discussions of this kind have been dominated by western science. The limitations of that knowledge are now being recognized. By engaging in these issues, communities, under the leadership of Elders, have the opportunity to teach the broader Canadian society about alternative approaches to health, and in particular the relationship between health and the natural environment.

ACKNOWLEDGMENTS

First and foremost, the authors would like to acknowledge and thank the Elder delegates who participated in this forum: Pierre Robillard, Ernest Skull, and Senator Simon Robillard from Black Lake; Madeline Goulet and Tom Pelly from Cumberland House; Alfred Naldzil and Pauline Sanger from Fond du Lac; George St. Pierre and Sylvia Tsannie from Hatchet Lake; Lawrence Marion and Riley Burns from James Smith Cree Nation; Catherine Charles, Elizabeth Charles, and Doris Halkett from Lac La Ronge Indian Band; Caroline Nelson, Lawrence Ballantyne, and Senator Allan Bird from Montreal Lake; Alan Longjohn and Norman Henderson from Prince Albert urban area; Oscar Beatty, Jean Beatty, Phillip Ratt, and Adolph Cook from Peter Ballantyne Cree Nation; Barnabus Head and Hector Head from Red Earth; Clara Whitecap and Lillian Lathlin from Shoal Lake; Howard Bighead, Robert Ermine, and John James Daniels from Sturgeon Lake; and Kenneth Crowe and Velma Buffalo from Wahpeton. Ceremonial direction was provided by Jacob Sanderson, Shirley Sanderson, Bill Ermine, Baptiste Turner, and Lorne Waditaka. In addition, the authors would like to thank the many volunteers and support personnel from the Prince Albert Grand Council Department of Health and Social Development and the First Nations University of Canada Northern Campus. The Prince Albert Grand Council Elders' Forum on Climate Change was made possible through financial support from the Prairie Adaptation Research Collaborative. Additional funds were provided by the Indigenous Peoples Health Research Centre. IPHRC is a joint project of the First Nations University of Canada, the University of Regina, and the University of Saskatchewan with funding provided by the Canadian Institutes of Health Research-Institute of Aboriginal Peoples Health and Saskatchewan Health through the Saskatchewan Health Research Foundation.

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Further Reading

NATIVE SCIENCE

Natural Laws of Interdependence

By Gregory Cajete Clear Light Publishers Inc., 2000 ISBN 1-57416-035-4 328 pages

In *Native Science*, author Gregory Cajete initiates the reader into a timeless tradition of understanding, experiencing, and feeling the natural world. He explores and documents the indigenous view of reality–delving into art, myth, ceremony, and symbol as well as the practice of Native science in the physical sphere. He examines the multiple levels of meaning that inform Native astronomy, cosmology, psychology, agriculture, and the healing arts.

Cajete points out parallels and differences between the models of indigenous knowledge and western science. For example, parallels exist between the indigenous view of spirit and the concept of energy underlying quantum physics and astrophysics. However, Cajete notes that some western thinkers are beginning to acknowledge that the contemporary scientific model leaves out much that is essential to understanding and dealing with the realities of the natural world. Unlike the western scientific method, indigenous thinking does not isolate an object or phenomenon to understand and work with it, but perceives it in terms of relationship. Relationship makes everybody co-creators. An understanding of the relationships that bind together natural forces and all forms of life has been fundamental to the ability of indigenous peoples to live for millennia in spiritual and physical harmony with the land. It is clear that the First Peoples offer perspectives that can help society work toward solutions at this time of global environmental crisis.

Cajete is a Pueblo Indian from Santa Clara Pueblo, New Mexico. He is an assistant professor at the Uni-

EDITOR'S NOTE

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versity of New Mexico's College of Education. He was the chairperson of Cultural Studies and dean of the Center for Research and Cultural Exchange at the Institute of American Indian Arts in Santa Fe. He is the author of *Look to the Mountain: An Ecology of Indigenous Education* and editor of *A People's Ecology: Explorations in Sustainable Living*.

THE CULTURAL MAZE

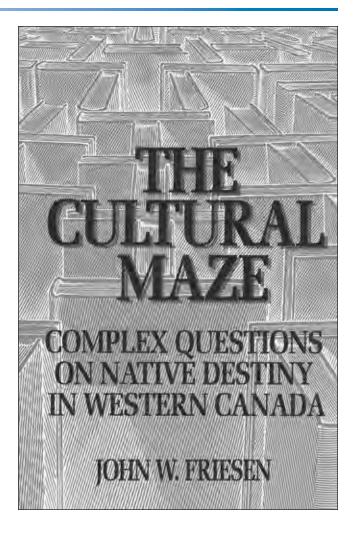
Complex Questions on Native Destiny in Western Canada

Edited by John W. Friesen Detselig Enterprises, 1991 ISBN 1-55059-030-8 256 pages

Native people in Western Canada today face countless complex questions in virtually every sphere of functioning-legal, economic, educational, and spiritual to name a few. *The Cultural Maze: Complex Questions on Native Destiny in Western Canada* explores the different aspects of some of the relevant issues affecting the Native community, with a view to clarifying the underlying challenges.

Written from the standpoint of experience and expertise, particularly in the case of Native writers, each chapter offers an in-depth understanding of the real issues affecting the future of Native culture. The first of three main sections provides a historical background to understanding some of the challenges with which the First Nation community is currently grappling. The second section outlines six contemporary issues facing the Native community—namely economic development, land claims, Aboriginal rights, language, educational policy, and local control of education. The third section explores the direction of Native cultural survival through a discussion of the role of Elders, higher education, and Canadian multiculturalism.

A treatise to the strong hope for the future that exists within the Native community, *The Cultural Maze* constitutes a realistic perspective on Native issues and puts its finger on the pulse of the challenges affecting Native destiny.



NORTHERN FRONTIER NORTHERN HOMELAND

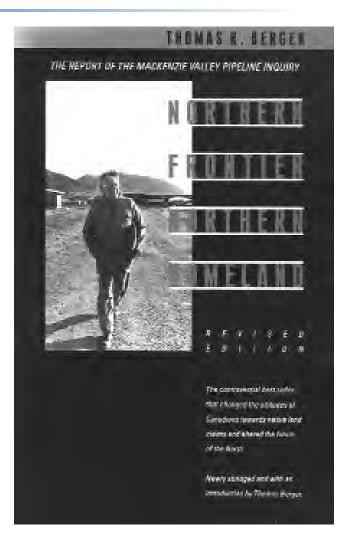
The Report of the Mackenzie Valley Pipeline Inquiry, Revised Edition

By Thomas R. Berger Douglas and McIntyre Ltd., 1988 ISBN 0-88894-601-5 272 pages

Northern Frontier Northern Homeland is one of the most important books ever published in Canada. As the report of the Mackenzie Valley Pipeline Inquiry headed by Thomas R. Berger, the book explores the social, environmental, and economic impact of building a natural gas and energy corridor from the Canadian Arctic to mid-continent. The controversial recommendations—pro-Native and pro-environment—changed the attitudes of many Canadians towards development in the North as well as affecting opinion abroad. Written in strong, clear language and including the eloquent testimony of Aboriginal people, the book became a best seller with more than 100,000 copies sold.

This revised edition of *Northern Frontier Northern Homeland*—shortened by the deletion of outdated material—remains valid and valuable. A substantial new introduction by Berger brings matters up to date and offers his present view on the future of the North. It reminds readers of Canada's opportunity to play a leading role in the preservation of the circumpolar basin.

Berger is a lawyer practicing in Vancouver, specializing in civil liberties, Constitutional law, and Aboriginal rights. He is the author of *Fragile Freedoms*, a book on human rights. Since the Mackenzie Valley Public Inquiry, he has devoted a great deal of time to understanding the people, environment, and problems of the Arctic regions. In 1985, after two years of travel throughout Alaska, he published *Village Journey: The Report of the Alaska Native Review Commission*, his report written for the Native peoples of Alaska on the land claims settlement there.



Overweight in First Nations Children:

Prevalence, Implications, and Solutions

Noreen D. Willows, PhD, Department of Agricultural, Food, and Nutritional Science, University of Alberta

Abstract

Obesity is a condition of excessive body fat to an extent that health may be compromised. Overweight children have high weight for their height and may be at risk for obesity and its complications. In Canada, children are classified as obese or overweight based on their body mass index (BMI), which is the ratio of a child's weight to height. A child with a high BMI typically has excess body fat and is referred to as obese. Although national survey data is lacking, the available evidence suggests that Aboriginal children and youth living in Canada have a high rate of overweight and obesity. Childhood obesity is associated with health problems such as type 2 diabetes, high blood pressure, high levels of fat and insulin in the blood, joint problems, gallstones, and breathing problems when sleeping. Considering the high rate of type 2 diabetes in Aboriginal communities, the health risks associated with obesity in childhood may be high for Aboriginal children. National surveys are required to interpret the extent of the problem in Canada. However, the available evidence suggests a need for programs to prevent obesity in children in Aboriginal communities. The development of programs requires a better understanding of the biological, community-level, cultural, and social contributions to obesity in children. Community-based research that examines the factors associated with obesity in Aboriginal children (e.g., characteristics of the mother, activity level, dietary intake, and body fat); looks at cultural perceptions, attitudes, and knowledge about overweight children; and identifies community barriers to the adoption of healthy lifestyles is required.

Key Words

Children, obesity, program planning, community-based research, Native American, diabetes, First Nations children

INTRODUCTION

Obesity is a condition of excessive body fat to an extent that health may be compromised. Overweight children have high weight for their height and may be at risk for obesity and its complications. Many definitions of obesity and overweight have been used in the past. Some researchers in the past have included obese children within the overweight category while other researchers have excluded obese children from the category of overweight. For these reasons, direct comparison of the rates of overweight and obesity from different studies should be made with caution. Hopefully, the 2000 release of pediatric growth charts that allow the terms overweight and obesity to be defined will resolve this problem.

Direct measures of body fat are not practical for clinical or community practice. For this reason, body mass

index (BMI), which correlates well with body fat, is now widely used to define overweight and obesity. BMI is the ratio of weight in kilograms to the square of height in metres. Pediatric growth charts that provide BMI reference values for children are available online at http://www.cdc.gov/growthcharts. Growth charts compare a child's BMI to that of other children using percentiles. The child's BMI percentile is in relation to other children of the same age and sex. The 50th percentile is the average BMI value for age. If a child's BMI is the 95th percentile that means the child's BMI is greater than or equal to the BMI measurements of 95 per cent of children that age. The remaining five per cent of children that age have a BMI that is greater than that child's. In Canada, a child with a BMI between the 85th and 95th percentile is considered overweight and a child with a BMI at or above the 95th percentile is considered obese.

In Canada and the United States, there is a high rate of overweight and obesity in boys and girls. There are noticeable differences in obesity rates among racialethnic groups. The reasons for these differences are unclear, but are likely the result of economic, social, and cultural factors that directly or indirectly affect the distribution of body weight in a population. In both Canada and the United States, the rate of overweight and obesity is considered to be higher in Aboriginal children than in the non-Aboriginal population (see Table 1). However, there have been limited surveys of these conditions in Aboriginal children in Canada.

Given the negative affects of obesity on health, the prevention of excess body fat that might lead to obesity must begin as early in life as possible. Programs for the prevention of obesity in Aboriginal children must be implemented. To be effective, prevention programs must not focus solely on changes in individual behavioural patterns. They must also focus on eliminating environmental barriers to healthy food choices and active lifestyles.²

The intent of this paper is to provide a review of the research published since 1990 on the rate of overweight and obesity and associated risk factors in Aboriginal children living in Canada and the United States. This paper also outlines areas of research that are required to develop effective interventions against obesity in children in Aboriginal communities.

RESEARCH RELATED TO OVERWEIGHT AND OBESITY IN FIRST NATIONS CHILDREN

Cree of James Bay, Quebec

The Cree of northern Quebec, whose population numbers 14,000, live in nine rural or remote communities. Historically, the James Bay Cree were hunters, fishers, and trappers. Since the late 1970s, the lifestyle of the people has changed dramatically with a noticeable decrease in physical activity and a change in diet to one that is largely market food. In 2002, 15 per cent of the population over 20 years had type 2 diabetes compared with 4.7 per cent of the population of Quebec. Diabetes has been diagnosed in youth.³ Obesity in children is a serious health problem. The rates of obesity has increased during the 1990s (see Table 1).⁴ In the early 1990s, it was found that overweight children participated less in physical activity and consumed fewer servings of milk products and fruits and vegetables than their normal-weight peers. Total energy intake from food was not evaluated.⁵ Overweight is observed early in childhood in this population with

the majority of preschool children being overweight or obese. Cree children living in the region 60 years ago had healthy body weights with only two per cent being obese. Due to geographic and cultural isolation, the James Bay Cree are a relatively genetically-stable population. This suggests that the increase in body weight reflects dramatic environmental alterations and, perhaps, an increase in biological risk factors for childhood obesity.

Mohawk of Kahnawake, Quebec

Kahnawake is an urban Mohawk community near Montreal. The traditional diet consisted of corn, beans, and squash supplemented by foods acquired through fishing, hunting, and gathering. In contrast, the current diet is predominantly market food. There is a high rate of type 2 diabetes and associated disease in adults in Kahnawake. For this reason, a school-based diabetes prevention program was started in 1994. Since the start of the program, there has been intense study of weight in children. The prevalence of overweight children is high (see Table 1). Because Mohawk children carry excess abdominal fat, the health risk of overweight is potentially heightened. Television viewing is related to body fat in these children and children obtain a high percentage of food energy from sugar.

Oji-Cree in Sandy Lake, Ontario

Sandy Lake First Nation is an isolated community in the boreal forest region of central Canada. The traditional hunting and gathering lifestyle of the inhabitants has been altered dramatically over the last few decades, comparable to the Cree of James Bay, Quebec. Likely due to this transition in lifestyle, illness

EDITOR'S NOTE

Body Mass Index is the ratio of weight in kilograms to the square height in metres.

A BMI of 18.5 or under is considered underweight.

A BMI of 18.5 to 24.9 is considered normal.

A BMI of 25 to 29.9 is considered overweight.

A BMI of 30 or more is considered obese.

 "Canadian Guidelines for Body Weight Classification in Adults," (Ottawa: Health Canada, Office of Nutrition Policy and Promotion, 2003) available at http://www.hc-sc.gc.ca/hpfb-dgpsa/onpp-bppn/qa_public e.html (accessed Feb. 8, 2005). due to obesity and type 2 diabetes in adults is common. 12 Children are overweight (see Table 1) with the rate being highest in preschool children (45.2 per cent in girls aged two to five years old). In those aged 10 to 19 years, overweight children watched more television, had a lower fitness level, and ate less fibre than children who were not overweight. 13

Anishnabai Temagami First Nation, Ontario

The Anishnabai Temagami First Nation located four hours north of Toronto is home to more than 200 permanent residents. Residents trace their history back 6,000 years in the area. A descriptive study showed that the rate of obesity was high among 38 Anishnabai youth ages five to 19 years (see Table 1). When data was compared against residents of European ancestry living in a nearby town, Anishnabai youth had a greater rate of obesity and subcutaneous (under the skin) fat and fat around the waist. Factors associated with obesity were not studied.

The United States

National surveys of Native American schoolchildren in the United States indicate that many are overweight or obese. 15 Studies of specific tribes show high rates of overweight among Navajo, Pueblo, Sioux, Pima, and Winnegabo or Omaha children (see Table 1). 16 High body fat contributes to overweight.¹⁷ Obesity begins early in life considering the high rate of obesity reported in American Indian preschool children (see Table 1).¹⁸ A study comparing the activity levels of Pima children (average age of 10 years) and their non-Native American counterparts found that Pima children spent significantly less time doing sport leisure activities and more time watching television.¹⁹ A study of Cherokee teenagers found no association between body measurements and energy intake or dietary patterns. Although it appears that overeating did not contribute to obesity, levels of physical activity were not assessed. 20 Research of Navajo adolescents found heavier youth had lower energy intakes than leaner youth. Physical activity levels were not assessed.²¹

Table 1a: Prevalence of Overweight and Obese First Nations Schoolchildren and Youth in Canada Compared with the General Population of Children

	Overweight (%)	Obese (%)
General Population of Children ⁱⁱ	about 30	about 10
First Nations and Inuit Regional Health Survey (late 1990s)iii	6 (boys), 7 (girls)	
Cree in Northern Quebec (early 1990s)iv	38	9 (boys), 24 (girls)
Cree in Northern Quebec (late 1990s) ^v	24	35
Mohawk of Kahnawake, Quebec ^{vi}	29.5 (boys), 32.8 (girls)	
Oji-Cree in Sandy Lake, Northern Ontario ^{vii}	27.7 (boys), 33.7 (girls)	
Anishnabai Temagami First Nation, Ontario ^{viii}		29

- i. The reference standards for defining overweight and obese differ among studies. Some studies include obese children within the overweight category while other studies exclude obese children from the category of overweight. Therefore, direct comparison of the prevalence rates of overweight and obesity should be made with caution.
- ii. M.S. Tremblay and J.D. Willms, "Secular Trends in the Body Mass Index of Canadian Children," *Canadian Medical Association Journal*, Vol. 163, No. 11 (2000) p. 1429-33.
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CONSEQUENCES OF OBESITY ON HEALTH AND WELL-BEING OF ABORIGINAL CHILDREN

Psychosocial Concerns

Obese children can have poor self-esteem and feel bad about their bodies.²² Until recently, little attention

has been paid to the weight perceptions and weight control practices of Aboriginal youth. Most of the available studies show a high rate of eating disorders. Two national surveys of weight control practices and weight perceptions in American Indian youth showed many adolescents to have weight dissatisfaction, low body pride, and weight concerns. Verweight youth were less likely than nonover-

Table 1b: Prevalence of Overweight and Obese First Nations Schoolchildren and Youth in the United States Compared with the General Population of Childrenⁱ

	Overweight (%)	Obese (%)
General Population of Children ^{IX}		10-15
National surveys ^x	25-39	9-11
American Indian and Alaska Native Preschool children ^{xi}		12 - 19
Navajo (late 1980s) ^{xii}	25 (boys), 33 (girls)	
Navajo (early 1990s) ^{xiii}	35 (boys), 40 (girls)	
Navajo (mid 1990s) ^{xiv}	41	15 (boys), 21 (girls)
Pueblo ^{xv}	40.4	
Sioux ^{xvi}	32.1 (boys), 30.6 (girls)	3.6 (boys), 6.1 (girls)
Pima ^{xvii}	74.6 (boys), 78.3 (girls)	44.1 (boys), 51.8 (girls)
Winnegabo and Omaha ^{xviii}	32.7 (boys), 34.4 (girls)	16.4 (boys), 13.4 (girls)
New Mexico Indian ^{xix}	35.5 (boys), 33.3 (girls)	
Predominantly Anishinaabe (Ojibwe)xx	21.3 (boys), 22.5 (girls)	48 (boys), 35 (girls)

- ix. R.P. Troiano et al., "Overweight Prevalence and Trends for Children and Adolescents: The National Health and Nutrition Examination Surveys, 1963 to 1991," *Archives of Pediatrics and Adolescent Medicine*, Vol. 149, No. 10 (1995) p. 1085-91.
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weight youth to engage in health-promoting behaviours and were more likely to perceive their health as poor.²⁵ In Canada, the limited evidence shows body size dissatisfaction in First Nation youth.²⁶

Physiological Concerns

Childhood obesity causes high blood pressure, high levels of fat and insulin in the blood, increased blood clotting, joint problems, gallstones, and breathing problems (apnea) while asleep.²⁷ Factors associated with heart disease have been identified in obese children as young as five years of age.²⁸ Aboriginal children can have poor health when overweight. Among Navajo adolescents, 10 per cent of boys and six per cent of girls were found to have high blood pressure. Overweight children had higher blood pressure.²⁹ For Plains Indian children from Oklahoma, the heaviest children had higher triglyceride (blood fat) levels and poorer cholesterol levels than children who weighed less.³⁰ Obesity is related to type 2 diabetes in First Nations adults.³¹ Because obese children have greater risk than normal weight children to become obese adults, obese children will likely have increased risk of diseases such as type 2 diabetes when they grow older.³² Mohawk children tend to carry their weight around their upper body, which is associated with greater risk of type 2 diabetes among adults.³³ The longer the length of time a person is obese, the more likely they are to get type 2 diabetes. For this reason, obese youth are at risk for developing the disease.³⁴ Until recently, type 2 diabetes was thought to be almost exclusively an adult disease. However, it has dramatically increased among First Nations children as young as four years of age.³⁵ Data from Pima children show risk factors for heart disease and diabetic complications in children with type 2 diabetes.³⁶ Up to 10 per cent of First Nations children with type 2 diabetes develop

kidney disease requiring dialysis.³⁷ Although genetics likely contributes to children getting diabetes, lifestyle factors that lead to obesity are believed to be more relevant.³⁸

LIMITATIONS OF THE KNOWLEDGE ON OBESITY IN FIRST NATIONS CHILDREN

There are several limitations of the knowledge on obesity in Aboriginal children (Table 2). In Canada, there is no national survey data on the body weight of Aboriginal children. Although the First Nations and Inuit Regional Health Survey reported on childhood overweight, these data are based on reports from parents from select First Nations reserves across Canada and Inuit communities in Labrador. It did not include children from Alberta, the territories, or some areas of Quebec (James Bay Cree, Nunavik Inuit and Mohawk communities).³⁹ Knowledge on the rate of overweight and obese children is restricted to a few intensely studied communities. If the results from these communities are typical of the Aboriginal population as a whole, then obesity in Aboriginal youth, as in non-Aboriginal youth, is a great public health concern. Despite reports of obesity in Aboriginal children associated with type 2 diabetes and risk factors for heart disease, there are only a few studies examining the causes of obesity.

There is little, quality data on the dietary and physical activity patterns of Aboriginal children as it relates to body weight despite evidence for obesity at young ages. Information on the social and environmental causes of obesity in children is even more limited. The poor success rate of adult obesity treatment programs points to the need for the development of obesity prevention programs targeted toward Aboriginal children. ⁴⁰ Given the limitations of

Table 2: Limitations of the Knowledge on Obesity in Aboriginal Children in Canada

- National surveys of body weight are limited
- Studies of preschool-age children are scarce despite evidence for high body weight in this age group
- Dietary patterns of children are not known
- Physical activity patterns of children are not known
- Social and cultural values towards obesity are not well understood
- Community-level barriers to activity and healthy eating are not well documented
- · Maternal contribution (maternal diabetes and overweight) are not well studied
- Early childhood factors that may contribute to overweight, such as bottle-feeding and infant feeding practices, are not well studied

the knowledge on obesity in Aboriginal children, it is not clear what form these interventions should take.

Dietary and Physical Activity Contributions to Obesity

To develop relevant nutrition education interventions for obesity, it is important to describe the diet of a population. However, few studies in Canada exist that describe the diet of Aboriginal children. Analysis of food use is an important aspect of this process because it is more practical in education to focus on specific foods and dietary patterns than on nutrients.⁴¹

The lack of data on physical activity in Aboriginal youth is an important consideration because physical activity has the potential to protect against obesity through maintenance of energy balance. Presently, knowledge of the factors that influence physical activity in Aboriginal children is limited. Confidence in ability to perform a physical activity; beliefs; and social values related to physical activity, involvement in community-based physical activity organizations, access to equipment at home, and parental physical activity have all been associated with, or predictive of, physical activity in children. Knowing the factors that influence physical activity in obese youth is important for designing effective intervention strategies. As

Maternal and Early Childhood Contributions to Obesity

As documented for the Pima of Arizona and Oklahoma Indians, factors associated with overweight childhood can be related to the mother's obesity and diabetes. Here are an extremely small number of studies in Canada looking at these factors as they relate to child growth. In the James Bay area of Quebec, Cree children who were bottle-fed had greater body weight than breast-fed children. Also, the body weight of the mother during pregnancy is a predictor of the birth weight of the baby. One study in Canada found that breast-feeding was associated with reduced risk of type 2 diabetes among Aboriginal children.

Community Contributions to Obesity

The environment makes it easy or difficult to adopt healthy behaviours.⁴⁷ However, there is little information about community factors contributing to obesity in Aboriginal populations. If communities in which

Aboriginal children live cause obesity, then understanding, measuring, and altering the environment is critical to reducing the rate of obesity. The environment is not just the physical environment such as the layout of communities, but also the environment of economic and social organization and cultural values. For example, environmental causes of type 2 diabetes in Mi'kmaq communities in Cape Breton have been identified as dependence upon market food and lack of access to traditional food. Similarly, in Cree communities in northern Quebec, traditional food is recognized as health-promoting, but the lack of access to this food forces many people to consume less-nutritious market food.

Social and Cultural Contributions to Obesity

Not all cultures see obesity as a health problem.⁵⁰ Even if concern about excess weight and awareness of health related risks of being overweight are known by a given culture, there may be little social motivation to support sustained weight loss efforts.⁵¹ Diabetes and obesity research in Aboriginal communities must therefore move beyond examining energy intake and physical activity. It must examine the economic, social, and cultural context of obesity.⁵² An understanding of how a culture thinks about obesity is essential for a better understanding of the impact obesity has on psychosocial concerns and weight control behaviours.⁵³ For example, for the Cree of northern Quebec, obesity may not be seen as a problem.⁵⁴ Similarly, for the Ojibway-Cree in northern Ontario, diabetes is not always seen as a serious health problem and diet and lack of exercise are not always understood to be causes of obesity.⁵⁵ The Ojibway-Cree have been reported to prefer larger body sizes; therefore, individuals in this culture might not be motivated to lose weight. Older people prefer larger body sizes perhaps because of associations between thinness and infectious diseases and tuberculosis.⁵⁶ Adopting obesity prevention practices faces barriers including the belief that fat in food is nourishing and healthy and that carrying extra weight is a sign of health and strength.⁵⁷

OBESITY PREVENTION PROGRAMS ARE REQUIRED IN ABORIGINAL COMMUNITIES

Because eating and physical activity habits are formed in childhood and may be carried into adulthood, prevention programs that encourage increased

physical activity and healthy eating habits targeted towards children need to be developed and tested. Program planners interested in developing obesity prevention programs in Aboriginal communities must better understand the causes of obesity before developing interventions. Effective programs to prevent children from becoming overweight must have respect for, and sensitivity to, language and cultural issues. Program planners must ensure that the program agrees with community culture and values. It is important to identify the local belief systems and language by which people label and interpret health problems before developing interventions. Documentation of the local perspectives of health and obesity will permit use of appropriate language for discussing obesity and its associated health risks and will contribute towards effective health promotion programs. A needs assessment can evaluate the community in terms of its health and nutritional status and its needs with respect to health, nutrition, and physical activity.⁵⁸ To be most effective, interventions must be developed with full participation of the communities. Examples of obesity prevention programs in Canada that follow a participatory model include the Kahnawake Schools Diabetes Prevention Project (KS-DPP)⁵⁹ and the Sandy Lake Health and Diabetes Project. 60 In the United States, participatory obesity prevention programs include Pathways, a multisite obesity-prevention study in American Indian school children living on reservations⁶¹ and the Zuni Diabetes Prevention Program.⁶² Evaluation of the success of these programs to prevent obesity is limited or not vet available.

In Canada, KSDPP was started in 1994 in the Mohawk community of Kawnawake near Montreal. It was the first primary prevention program for type 2 diabetes in a First Nations community in Canada. This elementary school-based program has a strong community health promotion focus. The aim of the intervention has been the development of a health education curriculum for children. It teaches about diabetes and its complications and about healthy eating and healthy food choices. The intervention is reinforced by community activities to encourage healthy food choices and physical activity. Healthy breakfasts are offered at school and a school policy allows children to bring only healthy lunches and snacks to school. At the community level, a community garden was developed and healthy eating promoted at community events, through radio shows, and in articles written in the local paper. Community canteens were persuaded to include healthy food choices and fewer unhealthy ones.⁶³ An evaluation of the diet of school children four years after the start of KSDPP found that children were not eating healthier.⁶⁴ Children were not asked specifically about how or why they made food choices. However, given the complexity of food choices in the environment, it was felt that the intervention likely did not provide children with enough information to help them in all the choices they make on their own. Evaluation of KSDPP is ongoing.

CONCLUSION

Data from the Canadian Census shows that Aboriginal children represent 5.6 per cent of all children in Canada. Children aged 14 and under represent one-third (33.2 per cent) of the Aboriginal population, far higher than the corresponding share of 19 per cent in the non-Aboriginal population. The Census counted 315,685 Aboriginal children aged 14 and under in 2001. Based on current research, up to one-third of these children might be at risk for obesity. The illness and disease expected to result from childhood obesity might be devastating unless preventative measures are taken.

Aboriginal communities require childhood obesity prevention interventions that are based on an understanding of the local risk factors for obesity and that have sensitivity to language and cultural issues. The identification of factors that support and reinforce healthy eating and physical activity at multiple levels of influence is crucial. The determinants that are the most relevant and easiest to change should form the basis for interventions. Individual behaviours must be understood within the context of social, cultural, economic, and physical environments that both support and hinder health behaviours. For this reason, interventions need to focus on both individual behaviour change and environmental change. It is the combination of factors acting together that promotes or prevents healthy eating and physical activity, and in turn healthy weight. Given the multiple and interconnected influences on weight, strategies focused at multiple levels are more likely to be effective than strategies focused at a single level. Policy initiatives to help create and sustain supportive environments are essential to make it easier for children and their families to make healthy choices. At the community level, there is the need for policies to ensure the provision of healthy food at a reasonable price and to ensure opportunities for physical activity.

Better information on the rate of obesity in Aboriginal children in Canada is particularly pertinent so

Aboriginal health organizations can respond to community health needs. The ability to establish baseline data and benchmarks will allow communities to monitor and evaluate the effectiveness of programs designed to decrease obesity rates. The situation may be remedied by the recent establishment of a number of institutes, organizations, and initiatives to improve the state of knowledge of the health of Aboriginal Peoples. The Institute of Aboriginal Peoples' Health whose mandate is to address the special health needs of Aboriginal Peoples in Canada was created as part of the Canadian Institutes of Health Research.⁶⁶ The National Aboriginal Health Organization, an Aboriginal-designed and -controlled body created in 2000, works to influence and advance the health and wellbeing of Aboriginal Peoples through knowledge-based strategies. Both these organizations should support community-based research initiatives to address the issue of obesity rates and its causal factors in Aboriginal children and the development of obesity prevention programs.

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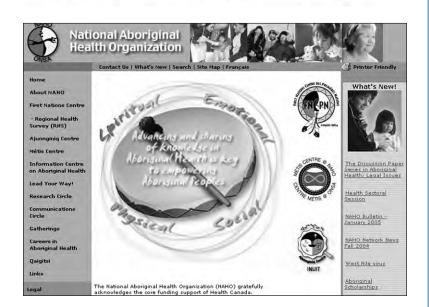


National Aboriginal Health Organization (NAHO)
Organisation nationale de la santé autochtone (ONSA)

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Vision Statement

The National Aboriginal
Health Organization,
an Aboriginal-designed
and -controlled body,
will influence and advance
the health and well-being
of Aboriginal Peoples
through carrying out
knowledge-based strategies.



The National Aboriginal Health Organization and the First Nations, Ajunnginiq (Inuit), and Métis Centres are unique in that we:

- Are founded on and are committed to unity while respecting diversity
- Gather, create, interpret, disseminate, and use knowledge on Aboriginal traditional and western contemporary healing and wellness approaches
- View community as the primary focus and view research methodologies as tools for supporting Aboriginal communities in managing health
- Reflect the values and principles contained in traditional knowledge and practices

Find out more about NAHO and its Centres by visiting:

http://www.naho.ca

Further Reading

BEING ALIVE WELL

Health and the Politics of Cree Well-Being

By Naomi Adelson University of Toronto Press, 2000 ISBN 0-8020-8326-9 160 pages

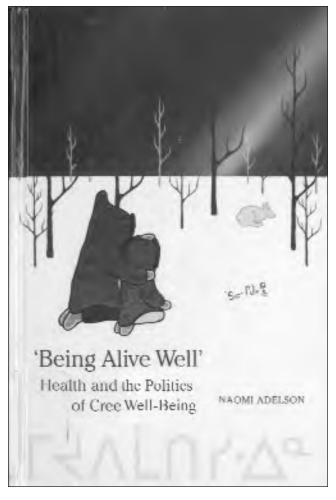
Being Alive Well: Health and the Politics of Cree Well-Being is a critical medical anthropological analysis of health theory in the social sciences with specific reference to the James Bay Cree of northern Quebec. In it, author Naomi Adelson argues that definitions of health are not simply reflections of physiological soundness, but convey broader cultural and political realities.

The book begins with a discussion of the study of health in the social sciences and a call for a broader understanding of the cultural parameters of any definition of health.

Following a chapter that outlines the history of the Whapmagoostui (Great Whale River) region and the people, Adelson presents the underlying symbolic foundations of a Cree concept of health, or miyupimaatisiiun. For the Cree there is no word that translates into English as health. The most apt phrase is *miyupimaatisiiun* or, as the author translate its, being alive well. Being alive well constitutes what one may describe as being healthy; yet it is less determined by bodily functions than by the practices of daily living and by the balance of human relationships intrinsic to Cree lifestyles. Being alive well means that one is able to hunt, to pursue traditional activities, to eat the right foods, and (not surprisingly given the harsh northern winters) to keep warm. This is above all a matter of quality of life. That quality is linked, in turn, to political and social phenomena that are as much a part of the con-

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temporary Cree world as are the exigencies of being alive well.

The core of this book is an ethnographic study of the Whapmagoostui Cree and their particular concept of *miyupimaatisiiun*. That concept is mediated by history, cultural practices, and the contemporary world of the Cree, including their fundamental concerns about their land and culture. In the contemporary context, health—or more specifically being alive well—for the Cree of Great Whale is an intimate fusion of social, political, and personal well-being, thus linking individual bodies to a larger socio-political reality.

Adelson is associate professor of Anthropology at York University. She has been working with the Whapmagoostui Cree of northern Quebec since 1988.

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The National Aboriginal Health Organization (NAHO) created ICAH to link individuals and health care professionals to resources they can use to promote and improve health for themselves, their families, and their communities.

ICAH is an innovative pathway for First Nations, Inuit, and Métis people to find relevant resources on health and well-being.

ICAH's English-French-Inuktitut website allows visitors to search four databases (separately or simultaneously) of information on Aboriginal health resources, programs and services for Aboriginal Peoples, careers and training in health and indigenous knowledge, and funding for Aboriginal students.

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NAHO's Objects

- To improve and promote health through knowledge-based activities
- To promote understanding of health issues affecting Aboriginal Peoples
 - To facilitate and promote research and develop research partnerships
- To foster participation of Aboriginal peoples in the delivery of health care
 - To affirm and protect Aboriginal traditional healing practices

220 Laurier Ave. W., Suite 1200, Ottawa, ON K1P 5Z9 Phone: (613) 237-9462 Toll-Free: 1-877-602-4445

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E-mail: naho@naho.ca Website: http://www.naho.ca