

Supplement Commentary

A commentary on land, health, and Indigenous knowledge(s)

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Abstract: This commentary explores the relationships between land, knowledge, and health for Indigenous peoples. Indigenous knowledge is fundamentally relational, linked to the land, language and the intergenerational transmission of songs, ceremonies, protocols, and ways of life. Colonialism violently disrupted relational ways, criminalizing cultural practices, restricting freedom of movement, forcing relocation, removing children from families, dismantling relational worldviews, and marginalizing Indigenous lives. However, Indigenous peoples have never been passive in the face of colonialism. Now more than ever, Indigenous knowledge in three critical areas—food and water security, climate change, and health—is needed for self-determination and collective survival in a rapidly changing world. (*Global Health Promotion*, 2019; 26(Supp. 3): 82–86)

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This we know: the earth does not belong to man, man belongs to the earth. All things are connected like the blood that unites us all. Man did not weave the web of life, he is merely a strand in it. Whatever he does to the web, he does to himself.

Chief Seattle, 1854. (Bristow, 2002, <http://www.webcom.com/duane/seattle.html>)

Indigenous values, beliefs, customs and protocols are meant to maintain the relationships that hold creation together (1). Without relationships, collectives are fragmented and the interdependent ways that have ensured the health and well-being of Indigenous individuals and collectives are endangered. In the context of family and community, the primacy of relationship is evident in children's first teachings and their identity formation (2,3). Their Indigenous identity is anchored in the land and reflected in their languages, arts, stories, ceremonies, and so on; Indigenous children are the cultural pathway to collective survival and well-being.

Colonization disrupted these relational ways. The

legacy of colonial strategies, such as residential schools, continues to impact the lives of Indigenous peoples in Canada and beyond. Colonial strategies were not only physical, with the dislocation of Indigenous nations and removal of children from their families and communities; they also attacked Indigenous knowledge and thought, dismantling Indigenous epistemologies and imposing constructs of eurocentrism, diffusionism, universalism, and hegemony. These non-relational concepts form the basis of the dominant socio-political landscape, underpinning, legitimating, and securing the policies that continue to marginalize and exclude Indigenous peoples in our own lands. The deep disparities in all measures of health and well-being that impact Indigenous peoples across the world today in colonial and postcolonial nations are woven into the historical and contemporary contexts of colonialism—a context in which the violent physical and spiritual separation of Indigenous people from their lands has been a primary objective.

Despite the violence of colonialism that forcibly removed Indigenous peoples from their lands, Indigenous peoples around the world have maintained

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connections to their lands, languages, and cultures, and are actively contributing to a resurgence of Indigenous knowledge that is passed through the generations. This knowledge is crucial to ongoing struggles as Indigenous peoples resist colonization of their lands and lives on many different fronts. This invited commentary considers three areas in which land and relational knowledge are critical in the struggle for Indigenous survival and resurgence: food and water security, climate change, and health. These are areas of fundamental concern in health promotion initiatives serving Indigenous peoples.

Food sovereignty and water security

Food sovereignty, according to the 2007 Nyéléni Declaration, refers to the right to culturally appropriate food produced through ecologically sound and sustainable methods, defined by the aspirations and needs of those who produce, distribute, and consume it (4). Food security has multiple facets for Indigenous peoples: food has cultural, physical, spiritual, and economic significance, and it can define the health of a community. In Canada, many Indigenous communities that rely heavily on ‘country food’ to maintain their physical health and cultural connections to the land do so in the face of enormous challenges—from the acceleration of encroaching development and resource extraction that reduces access to the land and raises concerns of contamination in traditional hunting and gathering territories, to the loss of food stocks through over-harvesting and competition from commercial industries. Shifts in diet from traditional, local land-based foods to imported, processed, store bought market foods diminish not only the physical health of Indigenous bodies, but also the social, cultural and spiritual health that is nurtured through practices of harvesting, processing, preparing, and sharing traditional Indigenous foods.

Cote, for example, documents how the Nuu-chah-nulth-aht on the western coast of Vancouver Island, British Columbia, fought for over a decade to win the legal right to control their fisheries, creating an aquatic resource management system that is rooted in the Nuu-chah-nulth values and principles of *hishuk’ish tsauwalk* (everything is one), *uu-a-thluk* (taking care of), and *iisaak* (respect) (4). The Nuu-chah-nulth approach to developing and implementing policies for sustainable production and consumption of traditional foods is rooted in the wisdom and

values of ancestral knowledge that honors and upholds sacred and respectful relationships to land, water, plants, and all living things (4).

Likewise, in the realm of water security, Indigenous knowledge is a crucial antidote to the dysfunctions of the Western scientific and technical approaches that have yielded little improvement in the shockingly high numbers of Indigenous communities that lack access to reliably clean water in Canada. Indeed, as Castleden *et al.* point out, the water issues that disproportionately and persistently impact too many Indigenous communities

cannot just be glibly attributed to the physical geographies of where Indigenous peoples live in Canada, but are rather the socio-political outcomes of colonial and racist policies, programs, and practices that have existed since the creation of the Indian Act in 1876 (5, p. 72).

Work to ameliorate the harms of these colonial policies and practices must be rooted not only in Indigenous rights (which are constitutionally bound, legally derived, and imply entitlement), but also—crucially—in Indigenous responsibility, which is passed through the generations and acknowledges a fundamental *relationality* in which water is holistically recognized as sacred—a living entity interconnected with all other living entities, and deserving of respect and protection.

The reciprocal nature of healing the land and healing the people is a central tenet of many different Indigenous knowledges. As the next section considers, this knowledge is crucial as we collectively move into a new era of human-induced climate change that is further undermining Indigenous lifeways deeply connected with the land, particularly in the circumpolar regions hardest hit by rising global temperatures.

Climate change

The October 2018 release of the UN Intergovernmental Panel on Climate Change (IPCC) report on global warming laid out a grim outlook for a warming planet that includes increasing intensity and unpredictability of extreme weather events and patterns, rising sea levels, and loss of biodiversity. The report confirms what Indigenous peoples in the Circumpolar North have observed for decades: that a warming planet is a radically and rapidly changing

one, and that these changes impact the well-being of those who live closest to the land first.

Jaakkola *et al.* document the impacts of climate change on the reindeer-herding Saami people, Indigenous to northern parts of Norway, Sweden, Finland, and the Kola Peninsula in Russia (6). Their research shows a pattern among the Saami that is similar to other Indigenous populations with a loss of well-being and quality of life associated with the loss of traditional, land-based livelihoods. Research with Saami reindeer herders confirmed observable changes associated with warming global temperatures such as changes in snow cover and vegetation, but also crucially identified chronic psychosocial stress as an outcome of a changing climate—specifically the anxiety, worry, and depression connected to loss of Saami cultural knowledge, traditions, and way of life that is inextricably bound to the land and reindeer.

In a similar vein, Durkalec *et al.* examined Inuit relationships with sea ice, drawing from the immediate experiences of expert sea ice travellers and Inuit elders (7). Sea ice is a central element of Inuit lifeworlds, acting as an extension of the land that contains critical travel routes to access wild food resources and culturally significant sites. Sea ice is seen by Inuit as not only a way to move through their territories, it also represents a fundamental aspect of their identity and culture, or what it means to be Inuit. For Inuit, knowledge of how to stay safe on the ice is encompassed by the concept of *ippigusutsianik*, which combines knowledge, skills, preparation, and mindset. In the context of climate change, however, this knowledge is destabilized:

Changes in the accuracy of sea ice travel knowledge affect the ability of Inuit to be on the ice safely, which transforms place-meanings themselves. These changes are transforming sea ice for Inuit from a place that is ‘theirs’, a place that means cultural and individual freedom and autonomy and is an important source of health, to a place that is less accessible, less known, and, in some places and times of year, literally disappearing (7, p. 24).

In the relational worldview common to Indigenous peoples around the world, it is logical that the loss of sea ice has a profound impact on the ability to cultivate and share spiritually significant

relationships with the land, compounding the losses of colonialism for Inuit people who are struggling to ensure survival of their ways of being for younger generations.

Indigenous health

As the discussion above shows, land, health, and knowledge are so closely intertwined for Indigenous peoples that it is impossible to consider any of them in isolation of the others. Indigenous knowledge and Indigenous health are both deeply rooted in the land—nurturing and protecting both requires nurturing and protecting the land. The National Collaborating Centre for Aboriginal Health (NCCAH), a knowledge translation and research center based in the traditional territories of the Lheidli T’enneh in Prince George, British Columbia, recognizes that Indigenous knowledge and relational thinking are critical in efforts to better understand and promote the health of Indigenous peoples.

As one of six National Collaborating Centres for Public Health established and funded by the Public Health Agency of Canada (PHAC), the NCCAH is uniquely positioned in Canada to support Indigenous peoples in achieving their optimal health and well-being through reclamation of their knowledge systems and self-determination, consistent with the goals of health promotion for Indigenous peoples. Knowledge translation is a critical strategy for promoting Indigenous peoples’ health, and is the primary focus of the NCCAH. In this way, the NCCAH addresses Indigenous peoples’ health disparities by supporting the connection between evidence and action-oriented projects and interventions, and by promoting the use of Indigenous-informed evidence to transform practice, policy, and program decision-making across all sectors of public health. In order to ensure that the work of the NCCAH remains rooted in Indigenous knowledge, it is guided by an advisory committee with members from diverse Indigenous communities, public health professionals, researchers, and other experts. The NCCAH’s knowledge translation and exchange activities are focused on enhancing awareness, understanding, and application of knowledge in Indigenous Health Promotion. To this goal, it has produced a wide range of resources (e.g. fact sheets, booklets, reports) in a variety of formats,

including print, digital, and audio-visual. Diverse Indigenous and non-Indigenous audiences, including parents and caregivers, frontline practitioners, program managers, researchers, and policy-makers are supported in their health promotion work by these resources.

Above all, the work of the NCCAH seeks to create space to explore linking evidence from diverse knowledge systems into action that is meaningful for promoting and improving the health of Indigenous communities. One of the most important ways of doing this is to privilege the voices of Indigenous people, amplifying the knowledge that exists in communities and is anchored in relationships to the land that reach back through the generations to a time before the violence of colonialism. All of the myriad determinants of health for Indigenous peoples point back to the critical relationships we have with our traditional lands and territories: our systems of self-government, our languages, our cultures, our healing traditions, our relationships to the animals and plants that nourish our bodies and spirits, our ceremonies and protocols for maintaining these relationships and ensuring our collective survival. As our experiences with the dislocations and diseases of colonialism have taught us, these critical elements of Indigenous wellness literally cannot exist without the land. One of the challenges for health promotion organizations like the NCCAH that seek to bridge between two vastly different systems of knowledge—one clearly dominant over the other—is to provide a forum in which Indigenous knowledge can ‘speak back’ to policy and decision-makers in order to break down siloed approaches to health that tend to ignore or devalue the importance of land and relationships to the health of Indigenous peoples.

Conclusion

While colonization continues to exact an enormous toll from Indigenous individuals and collectives around the world, Indigenous peoples have never ceased pushing back on assimilation, racism, and inequity. Indigenous-led health promotion initiatives such as the ones discussed above cross sectors with varying degrees of complexity, representing tangible and concrete ways for addressing inequities, tackling power differentials, and reclaiming self-determination for individuals and collectives. Solutions that are anchored in Indigenous ways of knowing and being

are, by nature, relational and land-based. Reversing the harms of colonialism requires a resurgence of Indigenous knowledge(s) that will repair and restore the broken relationships in the web of life affecting all living and non-living beings. We are the generations that our ancestors dreamed about, and we must confront the enormous challenges of our time. In turn, it is the collective survival and well-being of our children that we dream of. Our legacy to them is rooted in who we are as Indigenous peoples, our histories, our philosophies and knowledges, our connections to land and place, and most importantly, our ongoing struggle for reclamation and self-determination.

Note

This commentary is authored by one Indigenous and one non-Indigenous author. Both first and third person collective pronouns are used.

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Author biography

Dr. Margo Greenwood, PhD, Academic Leader of the National Collaborating Centre for Aboriginal Health, is an Indigenous scholar of Cree ancestry with years of experience and research focused on the health and well-being of Indigenous children, families and communities. While her academic work crosses disciplines and sectors, she is particularly recognized regionally, provincially, nationally and internationally for her work in early childhood care and education of Indigenous children and public health.

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