

Decreasing Cardiac Disease in Indigenous Women Living in Rural & Remote Canada

A Disparity between Indigenous and non-Indigenous

Indigenous women in Canada have an increased risk for cardiovascular disease (CVD) resulting from colonization and the consequential and ongoing social, political, and economic challenges.¹



Compared to non-Indigenous women, the CVD mortality rate is **76%** higher for Indigenous women in Canada.²

Truth and Reconciliation Call to Action 19: "... establish measurable goals to identify and close the gaps in health outcomes between Aboriginal and non-Aboriginal communities..."³

Factors Contributing to a Disproportionately High Risk

Determinants of Indigenous Health from Stem to Root⁴

1 Personal Behaviors

Pertinent health behaviors among Indigenous people include increased alcohol use, smoking, sedentary activity, and poor diet. These behaviors increase a person's risk for CVD.⁵

2 Environment

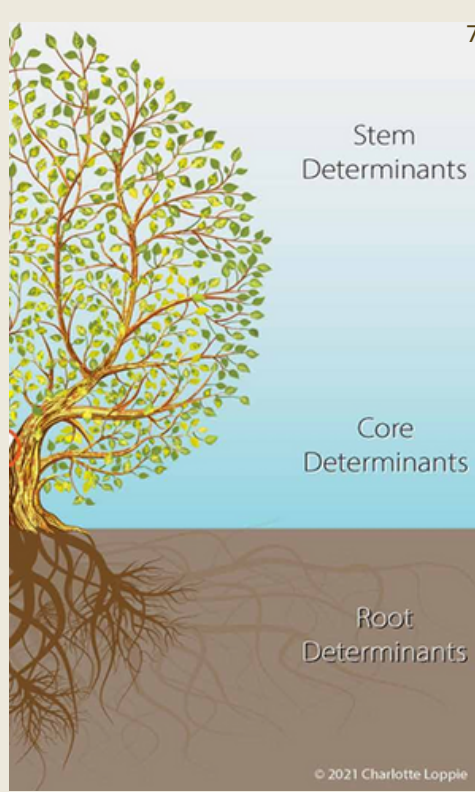
The majority of Indigenous communities are rural or remote where economic development lacks. This often leads to a low socio-economic status. Remote locations also create a barrier to accessing basic health services.⁴

3 Education

Indigenous people are less likely to obtain a high school diploma than non-Indigenous people. This limits employment options and the risk of poverty. It also limits a person's health literacy level, creating a barrier to making healthy choices.⁴

4 Food Security

Indigenous people are 2-3.5 times more likely to experience food insecurity than non-Indigenous people. Food insecurity is associated with increased chronic conditions, obesity, stress, and depression.⁴



5 Employment & Income

Indigenous people are less likely to be employed and have higher levels of unemployment. Indigenous people who are employed earn less than non-Indigenous people. Poverty decreases access to resources and increases rates of diabetes, obesity and cardiovascular health.⁴

6 Infrastructure and Resources

Many Indigenous communities lack buildings, schools, roads, transportation, waste and water treatment infrastructure, as well as fire, police and ambulance resources which all contribute to the health of a community.⁴

8 Colonialism

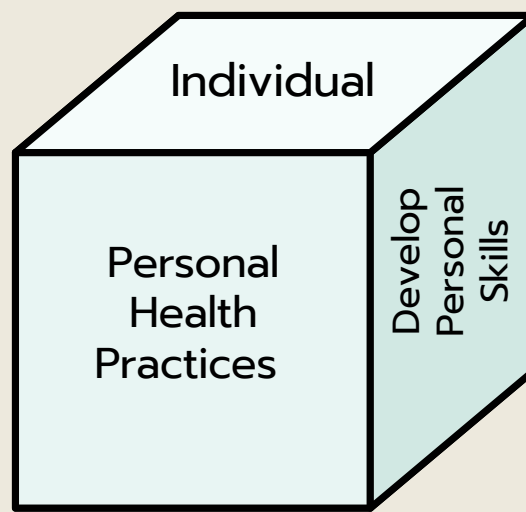
Racism and social exclusion has blockaded Indigenous Peoples' access to resources and conditions required to maximize their socio-economic status. Historical trauma is a determinant of health.^{4, 5}

7 Healthcare Access

Rural, remote, and Northern Indigenous communities lack access to health care in general. Racism and discrimination towards Indigenous people accessing healthcare acts as a social barrier.⁴

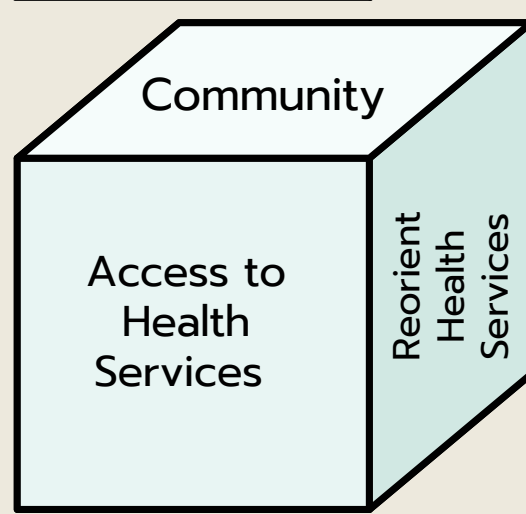
Population Health Promotion Model⁸

An approach to increase health literacy and improve access to primary care services² via internet service¹¹



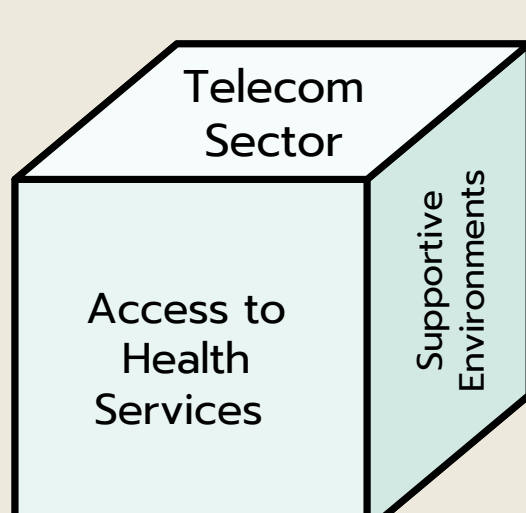
1 Increase Health Literacy

Education level is directly related to health literacy and the ability to make informed health decisions.⁹ Health professionals and organizations play a vital role in enhancing health literacy levels. Nurses and nurse practitioners can successfully improve health literacy among patients via culturally appropriate and engaging information sessions.¹⁰



2 Improve Access to Primary Care Services

With an increased risk, Indigenous people require access to CVD risk factor screening via a trusted health professional. Identifying and modification of risk factors can significantly decrease the development of CVD. Poor access to routine healthcare is a significant factor contributing to the high burden of CVD. Increasing access to culturally safe healthcare (in general) with inclusion of Indigenous care providers is warranted.²



3 Improve Access to Internet Service

With a limited access to healthcare (including scope of practice, equipment, and specialists), Indigenous Peoples' need to often travel out of their communities for care.¹¹ Enhancing the First Nations Telehealth Expansion to all remote Indigenous communities enables innovative access to care.¹²

Ottawa Charter for Health Promotion¹³

Applying three of the five action areas

1 Developing Personal Skills¹³ by Increasing Health Literacy

- Enables individuals to obtain, understand, and apply information to improve their health; accomplished via educational sessions or increasing health literacy; creates individual capacity and empowerment¹⁴

2 Reorient Health Services¹³ by Improving Primary Care Access

- developing health systems and programs to improve health and achieve health equity; includes establishing infrastructure and resources for health promotion¹⁴

3 Creating Supportive Environments¹³ by Improving Access to Internet

- entails altering physical and/or social environments to promote and protect health; achieved by changing environments, changing organizations, and enabling additional infrastructure or services¹⁴

NOTE: Prerequisites for health as identified in the Ottawa Charter for Health Promotion are lacking for Indigenous Peoples' in Canada^{4, 5} and necessary to be achieved for Indigenous Peoples' to reach their full health potential.¹³

The Intervention

To decrease the CVD risk burden, it is imperative that Indigenous Peoples' living in remote locations have access to healthcare. Remote environments create barriers to healthcare access due to geographical location and attracting healthcare providers.^{11, 15} Telehealth via internet connection is an innovative approach that has successfully provided healthcare access to remote Indigenous communities¹¹ and can be used to provide group education and support meetings.

This health promotion intervention addresses several determinants of Indigenous health and includes the following:

- personal behaviors:** culturally appropriate weekly group support meetings can support heart healthy behavior modifications; telehealth can facilitate this¹⁶
- environment:** telehealth bridges the distance between remote communities and healthcare providers when in-person appointments/consultations cannot be achieved¹⁵
- education:** culturally appropriate support sessions have been demonstrated to successfully increase health literacy in Indigenous populations¹⁷
- infrastructure & resources:** increased internet access enhances digital resources and access to healthcare¹¹
- healthcare access:** enables Indigenous Peoples' access to enhance their general health, while providing CVD screening^{2, 11}
- colonialism:** partnership with the First Nations Health Authority promotes Indigenous representation in achieving health equity¹¹

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