Infertility in Northern Remote Communities

Honzer Chen MD [1], Roisin Dooley MD[1, 4], Elvin Flett [2], Khaled Zohni MD, MSc, PhD [1, 3], Jason Elliott MD [1, 3], Gordon McTavish MD [1, 3]

[1] University of Manitoba, Department of Obstetrics, Gynecology & Reproductive Sciences, Winnipeg, Manitoba, Canada

[2] Four Arrows Regional Health Authority, St. Theresa Point First Nation, Manitoba, Canada

[3] Heartland Fertility, Winnipeg, Manitoba, Canada

[4] Ongomiizwin Indigenous Institute of Health and Healing, University of Manitoba, Winnipeg, Manitoba, Canada

MIDWEST Reproductive Symposium international

In Full Bloom The Future of IVF

2026 Midwest Reproductive Annual Symposium

July 26-29, 2026 Chicago, IL

University of Manitoba

Ongomiizwin – Indigenous Institute of Health and Healing

Mamow Anishininew Minoyawin "Island Lake People in Wellness Together"

HEARTLAND FERTILITY

BACKGROUND

In Canada, prevalence of infertility ranges from 11.5% to 15.7% based on STATSCAN data (Bushnik et al., 2012)

In the US, 8.5% of women aged 15-49 are infertile = 2.4 million women
13.4% have impaired fecundity = 9.7 million women (Snow et al., 2022)

- National Center for Health Statistics

One oft-overlooked domain of reproductive justice is the right to have a child (Perritt et al., 2022)

Black, Indigenous, and other people of color, those living on low incomes, and other historically marginalized communities often experience disparate access to infertility evaluation, treatment, and care.

Low and middle-income countries (80% of the world's population)

A study of public-school teachers from 12 states in Mexico showed 17% reported history of infertility

Paucity of research for infertility among marginalized populations

In a remote northern community in Australia

- 26.3% of Indigenous women reported infertility
- 8.2% primary infertility
- 18.1% secondary infertility

OBJECTIVE

To examine the prevalence, contributing factors, and healthcare access disparities related to infertility among Indigenous populations in Canada, with a focus on First Nations, Métis, and Inuit communities.

To inform culturally sensitive health policies and improve reproductive health equity.

DESIGN

Mixed-methods study

Quantitative analysis of national health survey data to estimate infertility rates.

Qualitative interviews to capture lived experiences of Indigenous individuals and the perspectives of healthcare providers.

MATERIALS & METHODS

Quantitative Component

Source: 2009–2010 Canadian Community Health Survey (CCHS)

Target group: Women aged 18–44 years

Key variable: Self-reported infertility

Statistical approach: Descriptive statistics, age-standardized prevalence estimates, and subgroup analysis by Indigenous identity

In Northern Canada, **First Nations mothers experience 2x higher rates** of stillbirths and babies who die in the first week of life than the national average.

Qualitative Component

- Semi-structured interviews conducted across Manitoba and Ontario
- Participants: Indigenous individuals with lived experiences of infertility, and healthcare providers offering reproductive care in Indigenous contexts
- Analysis: Thematic analysis using NVivo, with Indigenous peer reviewers validating themes for cultural resonance

- **Conceptual Framework:**
  - Guided by the **Two-Eyed Seeing** approach, combining Western biomedical knowledge with Indigenous ways of knowing
  - Equity-oriented framework addressing social determinants of health, structural racism, and colonial legacies

RESULTS

Elevated Infertility Prevalence:

- Higher reported rates of infertility among Indigenous women compared to non-Indigenous counterparts
- Notably elevated in remote and Northern communities

Barriers to Fertility Care:

- Socioeconomic marginalization (poverty, housing insecurity)
- Geographic isolation with limited access to reproductive specialists
- Lack of culturally safe services and trauma-informed care
- Distrust in medical institutions due to historical abuses (e.g., coerced sterilization)

Healthcare Provider Perspectives:

- Limited training in Indigenous health and reproductive justice
- Institutional constraints and fragmented referral pathways
- Interest in community-led models but lack of infrastructure

Design allows for triangulation of data and a nuanced understanding of infertility as both a biomedical and sociocultural phenomenon.

DISCUSSION

The most innovative technologies should be massively deployed in the most marginalized environs

Role for AI in bridging the gap and addressing equitable access to care

SUMMARY

Infertility among Indigenous populations in Canada is a **critical and underacknowledged** reproductive health issue. It is compounded by systemic barriers that reflect ongoing colonial harms and inequities in healthcare delivery.

Actionable Recommendations:

Implement culturally safe, trauma-informed, and community-led fertility care initiatives

Invest in Indigenous reproductive health navigators and community outreach

Advocate for policy change that enshrines reproductive justice, accessibility, and Indigenous self-determination

SELECT REFERENCES

Kildea S, Bowden FJ. Reproductive health, infertility and sexually transmitted infections in indigenous women in a remote community in the Northern Territory. Aust N Z J Public Health. 2000 Aug;24(4):382-6.

Perritt J, Eugene N. Inequity and injustice: recognizing infertility as a reproductive justice issue. F S Rep. 2021 Sep 2;3(2 Suppl):2-4.

Snow M, Vranich TM, Perin J, Trent M. Estimates of infertility in the United States: 1995-2019. Fertil Steril. 2022 Sep;118(3):560-567.