Background

- Climate change is threatening environmental and health systems all over the world.\(^1\)
- Indigenous peoples’ health in Northern Canada is highly impacted by environmental changes due to their reliance on local ecosystems for food and traditional practices.\(^2,3\)
- Acute gastrointestinal illness (AGI) can be acquired via environmental factors such as food or water.\(^4\)
- In the Inuit community of Rigolet, Nunatsiavut, Canada, the rate of self-reported diarrheal disease is extremely high; however, the rates of diagnosed and undiagnosed chronic gastrointestinal illness (GI) are unknown.

Goal and Objectives

Explore whether the rate of AGI in Rigolet is truly higher than the Canadian average, or if this rate is due to the undiagnosed chronic conditions in the community.

1. Estimate the prevalence of chronic GI in the Rigolet community.
2. Compare Rigolet’s rate of chronic GI to estimates found from studies in other Canadian communities and in developed countries.
3. Identify differences in healthcare utilization for chronic GI compared to AGI in Rigolet.

Methods

- Results from each survey were combined for analysis.
- Descriptive statistics were completed with statistical software.
- Univariable and multivariable analysis were conducted, controlling for repeated measures with a random effect.

Preliminary Results

- 15.7% of the population reported AGI symptoms in the two weeks before the survey.
- Incidence of AGI in Rigolet was 4.48 episodes/person-year averaged over the six surveys.
- Incidence of AGI in Rigolet when excluding chronic cases may be as low as 3.84 episodes/person-year.

Discussion

- The chronic GI rate in Rigolet may be similar to the national average in Canada (16.0%).
- Lack of access to healthcare may be related to the undiagnosed chronic conditions and increased rates of AGI.

References


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Next Steps

- Continue univariable and multivariable data analysis and modelling of causal variables.
- Prepare a peer-reviewed paper.
- Develop a plan to disseminate study results to community members in Rigolet.