Whose burden? Synthesizing evidence from diverse perspectives for a comprehensive description of disease burden

Amy Colquhoun,1 Arianna Waye,1,2 Karen J. Goodman1
1University of Alberta, Edmonton, Alberta, Canada; 2Institute of Health Economics, Edmonton, Canada

Background
- To address public concerns about a specific health threat and to develop effective public health strategies aimed at reducing related health risks, it is necessary to describe the extent of the health threat in the target population.
- This typically involves assessing the impact of the health threat using quantitative measurement of pertinent epidemiologic and economic indicators.
- To ensure that developed public health strategies are relevant to the target population, valuable insights may also be gained by incorporating the perspectives of individuals at risk in disease burden characterizations. There is limited information, however, about the most effective ways to synthesize different forms of evidence to construct a comprehensive assessment of the burden of disease.

Methods
- Research is currently underway in northern Canadian Aboriginal communities concerned over their high prevalence of Helicobacter pylori infection and the associated risk of stomach cancer.
- Burden of H. pylori infection and associated diseases in these populations will be assessed through:
  1. Characterization of self-described burden of disease by individuals at risk
  2. Quantification of burden of disease through epidemiologic and economic indicators
  3. Synthesis of various forms of evidence of disease burden for a comprehensive characterization

H. pylori
- Helicobacter pylori is a bacterium known to cause gastritis, peptic ulcers, & stomach cancer.
- Northern Aboriginal populations have a disproportionately high frequency of H. pylori infection and associated diseases.

Results
- In addition to quantitative measurements of epidemiologic and economic indicators, valuable insights can be gained by ascertaining how affected community members and their health care providers view related risks.
- This kind of information can:
  - inform quantitative research questions by identifying disease consequences that may further impact population health and well-being
  - support the development of effective knowledge translation and risk communication strategies
  - inform public health policies so that meaningful and effective interventions may be developed and implemented

Conclusions
- Information regarding public perspective and quantitative assessments of health indicators are both essential to capture the depth and complexity of health and disease.
- Incorporating multiple perspectives when characterizing disease burden promotes the development of public health solutions that are culturally-sensitive and cost-effective for the target population.
- This is particularly relevant when attempting to address public concerns about a specific health threat.

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Research context: CANHelp Working Group

Research aims include describing disease burden and risk factors associated with H. pylori infection, and identifying effective public health strategies for infection control.