Proximal Risk Factors for Chronic Disease in Ontario: Challenges and Opportunities of a Comparative Perspective

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Background

Prevalence, Health Problems and Burden

Tobacco

- In Ontario, about 18% of persons (aged 15 and older) are smokers.
- Estimated 13.1% of Ontario population regularly exposed to second-hand smoke in public places
- Tobacco use is responsible for about 30% of all cancer deaths in Canada
- Estimated cost of tobacco use in Ontario for 2002 is $6.1 billion; smoking contributed to estimated 13,224 deaths and loss of 184,304 potential life years in Ontario. Estimated cost for Canada was $17 billion

High Risk Alcohol Consumption

- About 80% of adult Ontario population drank alcohol in the past year and about 20% of men and 18% of women drink above the low risk drinking guidelines
- Associated with more than 60 chronic health conditions and types of trauma
- Alcohol consumption contributes to liver cirrhosis, several types of cancers, neuropsychiatric conditions, gastrointestinal conditions as well as maternal and perinatal conditions
- Estimated cost in Canada: $14.6 billion; in Ontario: $5.3 billion (based on 2002 data)

Unhealthy Eating

- Most Canadians do not meet the recommendations set out by Canada's Food Guide: Only 36% of men and 50% of Ontario women aged 18 and over consume vegetables and fruit five or more times per day
- Children aged 4-9, adolescents and majority of seniors do not consume the suggested daily amount of milk products. Men are heavy consumers of meat, linked with increased risk of colorectal cancer
- It is estimated that trans fat consumption accounts for 3,000 to 5,000 Canadian deaths per year due to heart disease
- Annual economic burden of unhealthy eating is estimated to be $6.3 billion in Canada, based on a 2000 Health Canada report.

Physical Inactivity

- Most Canadians are not physically active – 54%, and 90% of children and youth do not meet the guidelines set forth in *Canada's Physical Activity Guide*.
- In Ontario about 48% of adults (aged 20 and older) and 27% of youth (aged 12-19) were physically inactive in 2005.
- Contributors to physical inactivity include: large amounts of time watching television and playing on the computer, low participation rates in sports.
- Physical inactivity is estimated to cost $5.3 billion among Canadians in 2001, and estimated 21,000 died prematurely in 1995 due to a lack of physical activity.

Project Objectives

1. Highlight public health risks/damage associated with tobacco consumption, high risk alcohol consumption, unhealthy eating, physical inactivity and unhealthy weight
2. Outline several noteworthy initiatives in Ontario addressing these risk factors
3. Review transferability of prevention/control experiences across selected risk factors
4. Discuss emerging challenges in addressing multiple risk factors

Methods

1. Scan and Assessment → 2. Review and Identification of Transferrable Lessons → 3. Consultation → 4. Options and Challenges → 5. Recommendations

Environmental Assessment

Findings From Risk Factors Comparison

Author	Recommendation context	Applicability
K. Kersh & J. Moore (2002)	Alcohol, Illegal drugs, Sexuality, Tobacco	Obesity
M. Ashe et al. (2003)	Firearms , Alcohol, Firearms, Alcohol	Alcohol, Tobacco, Unhealthy eating, Obesity
K. Warner (2005)	Tobacco	Obesity
D. Yach et al.(2005)	Tobacco	Unhealthy eating and Physical Inactivity
M. Arora 2005/2006	Tobacco	Alcohol
L. Green et al. (2006)	Tobacco	Physical Inactivity
I. Gilmore 2007	Alcohol	Obesity
J. Garcia (2008)	Tobacco	Several other risk factors
P. Musingarimi (2008)	Tobacco	Obesity

Policy Options

Challenges

Effectiveness of policies is related to:

- Consequences – have a non-voluntary component
- Scope – impact lower and higher risk users
- Foci – target high risk behaviour

Many lessons to be learned from tobacco control:

- Importance of setting a comprehensive agenda
- Engagement of a wide range of organizations, institutions, experts and perspectives
- Persistence
- Knowledge exchange
- Capacity development and resource commitments
- Importance of the policy dimension
- Research, surveillance and evaluation
- Concept of dose includes but is not restricted to - efficacy and effectiveness of an intervention or policy

Policy Dimensions | **Addressing Multiple Risk Factors** | **Dose** | **Evaluation**

Conclusions

Common and diverse elements in risk factors:

- Moderation applies to use of food and alcohol for some adults, but abstinence is appropriate for tobacco
- Not all proximal risk factors have a dominant villain

Specialization:

- Working on each risk factor is both an asset and a challenge

Greatest transferability lies in how to approach the challenges and what to do:

- Consider the common principles that govern population level activities and individual behaviour
- Policy levers have generic high potency and common challenges to being implemented
- The popularity of an intervention may be the inverse of its effectiveness

Essential components of an effective intervention for any proximal risk factor, include:

- multiple partners
- good organization
- strong advocacy
- diverse but coordinated responses
- a strong orientation to measurable outcomes
- persistence in implementing evidence-based policies