



**Using knowledge
translation to define
priorities for
prison health research
in Canada**

Fiona Kouyoumdjian, MD MPH PhD
March 2016

Disclosures

None



Objectives

1. Participants will learn about the value of knowledge translation activities in informing decisions about research.
2. Participants will understand the complementary role of knowledge synthesis and exchange activities.
3. Participants will hear the results of knowledge translation activities to define priorities for research in prison health in Canada.



Case

You are a junior researcher and you want to focus your research on the health of prisoners. You want to do research that can positively impact the health of this population, and you recognize that there are many topics that are important to work on.

You are also aware that uptake of research findings is challenging in this area, and you want to optimize the chances of your research affecting policy and practice.

How do you identify priority topics on which to focus your research?



Why do we need knowledge translation?

- problems:
 - research may not focus on most important topics
 - knowledge created through research may not lead to better health or health care
- solution= knowledge translation
 - defined as “a dynamic and iterative process that includes synthesis, dissemination, exchange and ethically-sound application of knowledge to improve the health [of Canadians], provide more effective health services and products and strengthen the health care system” (Canadian Institutes of Health Research, 2015)



Background: How do we prioritize topics for research?

- personal experience and research context: expertise, contacts, funding opportunities



Background: How do we prioritize topics for research?

- personal experience and research context: expertise, contacts, funding opportunities
- systematic approach may involve consideration of:*

Questions	Domains	Characteristics		
Is it a big problem?	Burden of disease	<ul style="list-style-type: none"> • population prevalence • impact: DALYs, mortality, etc. 		
Can we do anything about it?	Intervention characteristics	<table border="0"> <tr> <td> <ul style="list-style-type: none"> • efficacy • safety • cost-effectiveness </td> <td> <ul style="list-style-type: none"> • acceptability • feasibility </td> </tr> </table>	<ul style="list-style-type: none"> • efficacy • safety • cost-effectiveness 	<ul style="list-style-type: none"> • acceptability • feasibility
<ul style="list-style-type: none"> • efficacy • safety • cost-effectiveness 	<ul style="list-style-type: none"> • acceptability • feasibility 			
Is it possible to affect change?	Context	<ul style="list-style-type: none"> • equity, ethical, legal, political factors 		

*modified from framework for assessing immunization programs
(Erickson *et al.*, 2005)



Background: Knowledge translation activities avoid waste

- consider:

Factors	Methods to elucidate
The needs of potential users of research evidence	<ul style="list-style-type: none">• Knowledge exchange
What is already known or already being researched	<ul style="list-style-type: none">• Knowledge synthesis• Environmental scan

(Chalmers *et al.*, 2014)

- important to include persons with different perspectives in knowledge translation activities



Methods

- We conducted four knowledge translation (KT) projects between 2013 and 2015 to define the landscape of prison health research in Canada:

KT project	Relevance
1. Systematic review of interventions	<ul style="list-style-type: none">• identify interventions that improve health• define which interventions have been studied• define areas that have not been studied
2. Scoping review of research in Canada	<ul style="list-style-type: none">• reveal how much research has been done• show which topics have been studied• identify persons working in this field
3. Narrative review of research in Canada	<ul style="list-style-type: none">• describe known burden of disease
4. Delphi process	<ul style="list-style-type: none">• consensus-building process to define research priorities for next 10 years



KT Project 1: Systematic review of randomized interventions to improve health in prisoners/post-release

- relatively few randomized trials considering population size and burden of disease: 95
- most research focused on men, conducted in US (*only 2 in Canada), focused on disease-specific outcomes
- we identified interventions that improved:
 - mental health
 - substance use
 - infectious diseases
 - health service utilization

(Kouyoumdjian *et al.*, 2015, American Journal of Public Health)



KT Project 2: Scoping review of health status research in Canada 1994-2014

- little research done on the health of prisoners in Canada: 194 studies on health of prisoners/ ex-prisoners in Canada 1994-2014
- most studies conducted with men, in federal facilities, focused on mental health, substance use, social determinants of health
- lack of data on persons in provincial facilities and post-release

(Kouyoumdjian *et al.*, 2015, BMC Public Health)



KT Project 3: Narrative review of health status data

- summarized health status data from studies identified in scoping review
- people in custody have poor health status compared to general population:
 - social determinants of health
 - mortality (in custody)
 - mental health
 - substance use
 - communicable diseases
 - sexual health

(Kouyoumdjian *et al.*, in press, Canadian Family Physician)



KT Project 4: Delphi process to define prison health research priorities in Canada for next 10 years

- invited key stakeholders to define research priorities and then to indicate agreement with each identified priority
- identified 71 topics, with >80% consensus on 7 topics:
 - diversion and alternatives to incarceration
 - social and community re-integration
 - creating healthy environments in prisons
 - health care in custody
 - continuity of health care
 - substance use disorders
 - the health of Aboriginal persons in custody

(Kouyoumdjian *et al.*, 2016, BMJ Open)



Return to the case...

Informed by these KT activities, we have decided to focus research on:

Domains	A) Linkage with primary care	B) Substance use and substance use disorders
Burden of disease	<ul style="list-style-type: none"> • poor access to primary care • could address multi-morbidities and determinants of health 	<ul style="list-style-type: none"> • prevalent • large burden of disease
Intervention characteristics	<ul style="list-style-type: none"> • evidence regarding effective interventions 	<ul style="list-style-type: none"> • effective interventions not implemented
Context factors	<ul style="list-style-type: none"> • political focus on primary care • continuity of care, re-integration priorities in Delphi 	<ul style="list-style-type: none"> • priority in Delphi • funding opportunities



Discussion

- use of knowledge translation activities allows us to address the problems of identifying important research topics and translating research into better health
- need to include diverse stakeholders in knowledge translation activities, including persons with a history of incarceration



Acknowledgments

- Fellowship supervisor: Stephen Hwang
- co-investigators on KT projects: Glenn Brown, Ingrid Binswanger, Kaite Burkholder, Samantha Green, Fareen Karachiwalla, Lori Kiefer, Stuart Kinner, Mo Korchinski, Jessica Liauw, Kathryn McIsaac, Flora Matheson, Lucie Pivnick, Andree Schuler, Diego Silva, Winnie Siu, Pam Young
- funding for scoping review, narrative review, and Delphi activities:



CIHR IRSC



Canadian Institutes of Health Research
Instituts de recherche en santé du Canada



References (printed list available on request)

- Canadian Institutes of Health Research. 2015. Knowledge translation. <http://www.cihr-irsc.gc.ca/e/29418.html>
- Chalmers, I., *et al.* 2014. How to increase value and reduce waste when research priorities are set. *The Lancet*. 383: 156-65.
- Erickson, L.J., De Wals, P., Farand, L. 2005. An analytical framework for immunization programs in Canada. *Vaccine*. 23: 2470-2476.
- Kouyoumdjian, F.G., McIsaac, K.E., Liauw, J., Green, S., Karachiwalla, F., Siu, W., Burkholder, K., Binswanger, I., Kiefer, L., Kinner, S.A., Korchinski, M., Matheson, F.I., Young, P., Hwang, S.W. A systematic review of randomized controlled trials of interventions to improve the health of persons during imprisonment and in the year after release. *American Journal of Public Health*. 105 (4): 13-33.
- Kouyoumdjian, F.G., Schuler, A., Matheson, F.I., Hwang, S.W. The health status of prisoners in Canada: A narrative review. *Canadian Family Physician*. In press, 2016.
- Kouyoumdjian, F. G., Schuler, A., Hwang, S. W., Matheson, F. I. Research on the health of people who experience detention or incarceration in Canada: a scoping review. *BMC Public Health*.15: 419.
- Kouyoumdjian, F.G., Schuler, A., McIsaac, K., Pivnick, L., Matheson, F.I., Brown, G., Kiefer, L., Silva, D., Hwang, S.W. Using a Delphi process to define priorities for prison health research in Canada. *BMJ Open*.

