Knowledge Translation – Public Health Perspectives

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NEXUS Spring Institute
UBC
April 16, 2009
## Overview

- Evidence in Public Health
- Knowledge Translation (KT) and Evidence-Informed Decision-Making
- Shifting Paradigms of KT
- Current Opportunities
- KT in Practice
  - National
  - International
- Some Practical Ingredients for Success
- Summary
Challenges for facilitating use of knowledge in Public health

• Work often done in silos in highly structured organizations
• Few incentives to share resources and knowledge
• New information produced at increasing rate
• Many stakeholders with multiple needs but limited coordination mechanisms
• KT under-resourced
• Potential for inconsistent information between knowledge providers
Nature of Interventions in Public Health
Implications for evidence

• Complex, multi-faceted programs that cannot be randomized

• Natural, community environments and complex set of factors that cannot be controlled

• Time lag to see final outcomes,

• Role of **context** in interpreting and using knowledge/evidence, importance of assessing applicability & transferability
Evidence based or Evidence informed?

- Evidence in Public Health
  - Research
  - Surveillance
  - Practice/experience
  - Evaluation findings

- Other factors/influences
  - Media
  - Advocacy
  - Politics
  - Timing
  - Opinions etc.

adapted from Levesque, 2007
Policy Decision-making Process

Milne, 2008
Long Lag Period Between Knowledge and Action

Prevalence of smokers in Canada (males and females, 15 years and older) (%)
So how does “Knowledge Translation” fit with Evidence-Informed Action?
Definitions and Terms

• Knowledge Translation (KT)
  – Making users aware of knowledge/innovations and facilitating their use of it to improve health
  – Closing the gap between what we know and what we do (reducing the know-do gap)
  – Moving knowledge into action

• Confusing terminology:
  – knowledge mobilization, knowledge development and exchange, knowledge transfer, dissemination, ....
Key Elements of KT

• Knowledge synthesis
• Dissemination
• Knowledge exchange
• Ethically sound application of knowledge
Why Should I Care About KT?

• Empirical work has shown that the simple availability of knowledge does not guarantee use.
• Inefficient use of limited health resources!
• Large amount of information, but insufficient:
  – Overall synthesis to support action
  – Dissemination/exchange
  – Uptake by decision makers
  – Application of knowledge

“Are we having an impact?”

(My question is: Are we making an impact?)

(Murphy, 2006)
Some KT Theories

- Push \{(researcher action, e.g. dissemination)\}
- Pull \{user demand, capacity building\}
- Knowledge Mobilization and Exchange
Knowledge Brokers

- Knowledge brokering links researchers and decision makers, facilitating their interaction so that they are able to:
  - better understand each other's goals and professional culture,
  - influence each other's work,
  - forge new partnerships, and
  - use evidence into decision making.

- Individuals or organizations can be knowledge brokers

adapted from Murphy, 2006
Knowledge Brokers

Case example: Tobacco

- Canadian Council for Tobacco Control (CCTC)
- The CCTC acts as a knowledge broker to:
  - Bring people and organizations together
  - Link key players and decision makers
  - Ensure timely and practical transfer of critical knowledge and skills, and
  - Support, promote and further a comprehensive approach to tobacco control.
Shifting Paradigms

Old Paradigm
• Researchers do research
• They communicate it effectively
• Recipients use the results . . .

One way knowledge transfer

New Paradigm
• Researchers and users select topic, questions
• Researchers and users bring different expertise
• Joint interpretation, application in specific context . . .

Knowledge translation
Multi-directional, and multiple inputs from research, practice, experience and culture
Shifting Paradigms?

**Goal:** more use of research
**Goal:** responsive and relevant research

Communication & dissemination
Genuine partnership mutual respect

Increasing user capacity
Focus on organizational structure and culture

KT literature
Management literature

Info sharing
Change management

Power sharing
Current Opportunities

• Increased research/community collaboration
• Increased multidisciplinary intervention research
• Increased emphasis by research funding agencies:

[Logos of CIHR and Canadian Health Services Research Foundation]
## KT Action at CIHR

### KT Focus

<table>
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<tr>
<th>KT Focus</th>
<th>Funding mechanisms</th>
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| Synthesis       | • CIHR funds the Canadian Cochrane Network and Centre  
|                 | • KT Synthesis  
|                 | • Operating grants competition                                                                                                                                 |
| Integrated KT   | • Partnerships in Health System Improvement (PHSI)  
|                 | • Strategic research funded through institutes  
|                 | • Meeting, Planning and Dissemination grants to develop collaborative relationships and grant proposals                                                                                                                                 |
| End of Grant KT | • Allowable expense as part of a grant application  
|                 | • KT Supplement Grants  
|                 | • Meeting, Planning and Dissemination grants to disseminate results                                                                                                                                 |
| Science of KT   | • Operating grants competition-KT Panel  
|                 | • Strategic calls from the KSE Branch on theories and methods of KT                                                                                                                                 |
Knowledge Brokering

- CHSRF is evaluating the impact of knowledge brokering on organizations wishing to incorporate research into their decision-making processes through demonstration projects.

The objectives of the demonstration site program are:

1) to stimulate the implementation of structures, processes, or people in decision-making organizations dedicated to linking researchers with decision makers in their organizations and facilitating their interactions; and

2) to increase the appropriate use of quality research in the decision-making processes of successful applicant organizations.

Each of the six sites will undertake formative and summative evaluations of their individual projects.
Examples of KT in Practice

• **National**
  – The Canadian Heart Health Initiative (CHHI)
  – National Collaborating Centres (NCC)
  – Canadian Best Practices Portal (CBPP)

• **International**
  – EVIPNet (Evidence-Informed Policy Network)
  – Commission on Social Determinants of Health
The Canadian Heart Health Initiative

Linking Research, Policy and Action

a planned, phased approach

Policy Development
Heart Health Surveys
Demonstration
Evaluation
Dissemination


Deploy capacity
Towards a Healthy Canada

- build capacity
- develop research and implementation platform
- forge intersectoral partnership

- expand partnerships
- use knowledge capital

Canada, 2001
## National Collaborating Centres (NCCs)

<table>
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<tr>
<th>NCC</th>
<th>An Example of a Current Activity related to KT</th>
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<tr>
<td>National Collaborating Centre for Aboriginal Health</td>
<td>In Aboriginal Health Policies – developing a comparative inventory of policies, with accompanying case studies, for use as a research tool to inform policy-makers and practitioners.</td>
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<tr>
<td>National Collaborating Centre for Methods and Tools</td>
<td>Launching the online Registry of Methods and Tools.</td>
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<tr>
<td>National Collaborating Centre for Infectious Diseases</td>
<td>Partnering with the NCC for Aboriginal Health on the development of an evidence review and educational tools for cervical cancer prevention.</td>
</tr>
<tr>
<td>National Collaborating Centre for Healthy Public Policy</td>
<td>Emphasizing knowledge sharing and dissemination, particularly through workshops, while initiating an interactive tool for assessing and responding to the public health community’s needs.</td>
</tr>
<tr>
<td>National Collaborating Centre for Environmental Health</td>
<td>Conducting a multi-year project to enumerate past cases of waterborne illnesses in Canada and identify drinking water system risk factors (guided by a steering committee of policy-makers, practitioners, and researchers).</td>
</tr>
<tr>
<td>National Collaborating Centre for Determinants of Health</td>
<td>Identifying and disseminating systematic reviews and gaps relative to early child development and public health interventions with cross-cutting themes of women and gender equity, employment and working conditions.</td>
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Canadian Best Practices Portal for Health Promotion and Chronic Disease Prevention

- **Purpose:** to improve policy and program decision-making by enabling access to the best available evidence on chronic disease prevention and health promotion

- **Target audience:** Decision makers in health promotion, public health and chronic disease prevention, including:
  - Frontline public health workers (e.g. health promotion planners)
  - Non-government and voluntary organization program coordinators

- All posted interventions are screened and assessed for effectiveness

International KT Action

- EVIPNet (Evidence-Informed Policy Network)
  - is a WHO initiative that encourages policy-makers in low and middle-income countries to use evidence generated by research.
  - Promotes the systematic use of health research evidence in policy-making
  - Promotes partnerships to facilitate policy development and implementation
  - Uses best evidence available

Activities:
- production of policy briefs, research syntheses
- deliberative forums, networking opportunities
International KT Action

• Commission on Social Determinants of Health
  • Launched in March 2005
  • brings together leading scientists and practitioners to provide evidence on policies that improve health by addressing the social conditions which people live and work

• Objectives:
  • To support policy change
  • Establishing Health as a shared goal
  • Help build a sustainable global movement for action on health equity and social determinants

• Activities:
  • Country action
  • Knowledge Networks
    • E.g. Women and gender equity Knowledge Network
    • Reports that helped inform the Commission’s *Closing the gap in a generation: Health Equity Through Action on the Social Determinants of Health* Report
Practical Ingredients for Success

- Researcher/community collaboration
- Role of credible champions
- Aligning with larger policy trajectories
- Linking with existing organizational activities
- Addressing concerns of decision-makers
- Using effective communication strategies
Researcher/Community Collaboration

Action Research – University of Alberta

• Healthy Alberta Communities

• Addiction and Mental Health Research Laboratory

• Community-University Partnership for the Study of Children, Youth, and Families (CUP)
Role of Credible Champions

• People and their interactions matter more than the message

• On-going liaison and institution inter-connections

• Personal contact and trust-building through quality relationships over time can offer systems change potential

• Necessary for:
  – Access to decision-making settings
  – Credibility

In memoriam Dr. Andrés Petrasovits
February 11, 1937 – July 24, 2001
Aligning with Larger Policy Trajectories

• Aboriginal agenda
  – Growing recognition of specific needs/rights of Aboriginal communities

• Children and family agenda
Addressing Concerns of Decision Makers

• Presenting a solution to an existing problem, NOT need for more research
  – Include short term objectives
Using Effective Communication Strategies

• Focus to specific audience (tailored message)
  – CHSRF 1-3-25 Format
  – Use of language, concepts of decision makers

• Use of local case studies
  – “Stories” make issues real
  – Speak to organizational values, mission

• Credible messenger

• Use of visuals
  – Geographic Information Systems (GIS)
    • Better decisions through mapping and models
    • Mapping of social determinants of health
    • Visuals and Colors (rather than stats) to communicate epidemics
What Can Universities do to Facilitate KT?

- Incentives for engaged scholarship in the review process of faculty
- Facilitate multidisciplinary KT curriculum
- Integrated KT faculty position / focal point
Closing Reflections

• KT from a Public Health perspective is important as it is inherently focused on continuous learning

• More opportunities and incentives for researchers to engage in collaborative action and co-production of knowledge with various knowledge users

• Strategic use of evidence
“A little knowledge that acts is worth infinitely more than much knowledge that is idle.”

Khalil Gibran (1883-1931)
Thank You

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References


References


