Wicked Problems in Health Equity

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National Collaborating Centre for Healthy Public Policy
The National Collaborating Centres for Public Health

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Our mandate

– Support public health actors in their efforts to promote healthy public policies

Our areas of expertise

– The effects of public policies on health
– Generating and using knowledge about policies
– Intersectoral actors and mechanisms
– Strategies to influence policy making
Overview of workshop

• Defining wicked problems
• CAS and wicked problems
• Keys to resolving wicked problems
• Issue and dialogue mapping
• Mapping policies|programs to reduce health inequities
Wicked problems

Dilemmas in a General Theory of Planning*

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ABSTRACT

The search for scientific bases for confronting problems of social policy is bound to fail, because of the nature of these problems. They are “wicked” problems, whereas science has developed to deal with “tame” problems. Policy problems cannot be definitively described. Moreover, in a pluralistic society there is nothing like the undisputable public good; there is no objective definition of equity; policies that respond to social problems cannot be meaningfully correct or false; and it makes no sense to talk about “optimal solutions” to social problems unless severe qualifications are imposed first. Even worse, there are no “solutions” in the sense of definitive and objective answers.
Wicked problems defined

1. Wicked problems cannot be defined once and for all.
2. They have no precise stopping point when they are solved.
3. There are no ‘right’ or ‘wrong’ solutions, only better or worse ones.
4. Each wicked problem is unique and specific to its context.
5. Each attempt to solve a wicked problem is unique and may affect an infinite set of related problems.
6. They are essentially unstable and resistant to policy solutions insofar as interventions involve multiple stakeholders.

(Rittel & Webber, 1973; Roberts, 2000; Blackman et al., 2006; Conklin, 2006)
# Common attributes

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Complex Adaptive Systems</th>
<th>Wicked Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Boundaries</strong></td>
<td>• Boundary definition not always clear</td>
<td>• Issues are interactive, complexly related, and dynamic.</td>
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<tr>
<td></td>
<td>• Boundaries more often established, not defined</td>
<td>• Not possible to define boundaries</td>
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<tr>
<td><strong>Holistic</strong></td>
<td>• The whole is different from the sum of its different parts, therefore must be</td>
<td>• Interconnectedness, interrelatedness, and interdependence of elements require</td>
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<tr>
<td></td>
<td>understood holistically</td>
<td>holistic approach</td>
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<tr>
<td><strong>Non-Linear Organization</strong></td>
<td>• Cause-effect relations difficult to determine</td>
<td>• Cause-effect relations difficult to determine</td>
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<td></td>
<td>• Spontaneous, self organizing systems</td>
<td>• Can seem unorganized due to lack of definitional boundaries</td>
</tr>
<tr>
<td><strong>Resolutions</strong></td>
<td>• No definitive resolution possible unless state change occurs</td>
<td>• No definitive resolution due to differing perspectives</td>
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<tr>
<td></td>
<td>• “Chaos-inducing” without state changes</td>
<td>• “no stopping rule”</td>
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<tr>
<td><strong>Limits on Predictability</strong></td>
<td>• Path dependant but not predictable</td>
<td>• Somewhat predictable patterns but still somewhat limited</td>
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<td>• Intrinsic limits due to holistic nature</td>
<td>• May include elements of chaotic systems with “strange attractors” defining</td>
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<tr>
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<td>• “strange attractors” help define patterns</td>
<td>points of interest</td>
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<tr>
<td><strong>Unintended Consequences</strong></td>
<td>• Changes result in unique and irreversible solutions</td>
<td>• Every solution has irreversible consequences &amp; is a one-shot operation</td>
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<tr>
<td></td>
<td>• Small changes can have large effect</td>
<td>• Changes affect system dynamics differently and are largely unpredictable</td>
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<td></td>
<td>• Collapse triggered if system pushed over the “edge of chaos”</td>
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</table>

*Adapted from: Waddock, Waddell, Meszoely, & Dentoni, 2015*
## Wicked vs. Tame Problems – Key Features

<table>
<thead>
<tr>
<th>WICKED PROBLEMS</th>
<th>TAME PROBLEMS</th>
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</thead>
<tbody>
<tr>
<td>There is no definitive formulation of a wicked problem.</td>
<td>have a relatively well-defined and stable problem statement.</td>
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<tr>
<td>Wicked problems have no stopping rule.</td>
<td>have a definite stopping point, i.e. we know when the solution or a solution has been reached.</td>
</tr>
<tr>
<td>Solutions to wicked problems are not true-or-false, but better or worse.</td>
<td>have a solution which can be objectively evaluated as being right or wrong.</td>
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<tr>
<td>There is no immediate and no ultimate test of a solution to a wicked problem.</td>
<td>belong to a class of similar problems which can be solved in a similar manner.</td>
</tr>
<tr>
<td>Every wicked problem is essentially unique.</td>
<td>have solutions which can be tried and abandoned.</td>
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<tr>
<td>Wicked problems have no given alternative solutions</td>
<td>Comes with a limited set of alternative solutions.</td>
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</tbody>
</table>

(adapted from: Ison & Collins, 2008 and Conklin, 2006)
Wicked problems: a travelling concept

• Social and policy planning
• Design (tech)
• Management theory
• Organisational communication
• Complex (adaptive) systems
• ...

Tame Problems

• Tame problems are those where stakeholders agree on the nature of the problem and on the best way to solve it.
Complex Problems

• Complex problems are those where stakeholders agree on the nature of the problem, but not on how to best solve it.
Wicked Problems

• With wicked problems, stakeholders agree neither on the nature of the problem, nor on its solution.
Taming wicked problems

« attempting to tame a wicked problem, while appealing in the short run, fails in the long run. » (Conklin, 2006, p.22)
Tackling wicked problems

• If wicked problems are different from tame and complex ones, how do we approach them?
• The classic scientific approach may not work.
• Wicked problems are compounded by technical and social complexity.
Traditional /Linear problem solution

(Conklin, 2006 p.9)
Opportunity-based problem solution

(Conklin, 2006 p.10)
Strategies for coping with wicked problems

• Authoritative
Strategies for coping with wicked problems

• Competitive
Strategies for coping with wicked problems

• Collaborative
Strategies for coping with wicked problems

• Key ingredients
  – Collaboration
  – Dialogue
  – Shared Understanding
Dialogic communication

• Key elements
  – Engaging contact
  – Active listening
  – Mirroring
  – Exploratory questions
<table>
<thead>
<tr>
<th>Discussion</th>
<th>Debate</th>
<th>Dialogue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present ideas</td>
<td>Succeed or win</td>
<td>Broaden perspectives</td>
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<tr>
<td>Seek answers/solutions</td>
<td>Look for weakness</td>
<td>Look for shared meaning</td>
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<tr>
<td>Persuade others</td>
<td>Stress disagreement</td>
<td>Find spaces of agreement</td>
</tr>
<tr>
<td>Share information</td>
<td>Focus on ‘right’ and ‘wrong’</td>
<td>Bring out ambivalences</td>
</tr>
<tr>
<td>Solve our problems</td>
<td>Advocate one perspective</td>
<td>Invite/allow differences of opinion and expertise</td>
</tr>
<tr>
<td>Give answers</td>
<td>Search for logic flaws</td>
<td>Discover collective meaning</td>
</tr>
<tr>
<td>Achieve preset goals</td>
<td>Judge other perspectives as inferior or distorted</td>
<td>Challenge our preconceived notions</td>
</tr>
<tr>
<td>Listen for disagreement</td>
<td>Listen in order to counter</td>
<td>Listen in order to understand</td>
</tr>
<tr>
<td>Avoid areas of conflict and difference</td>
<td>Focus on conflict and difference as advantage</td>
<td>Articulate areas of conflict and difference</td>
</tr>
<tr>
<td>Retain relationships</td>
<td>Disregard relationships</td>
<td>Build relationships</td>
</tr>
</tbody>
</table>

(Adapted from Kachwaha, 2002)
Issue and Dialogue Mapping
(Conklin, 2006)

• A technique for developing and mapping shared understanding of a problem
• Uses Issue Based Information Systems (IBIS – language) and Compendium (software)
• Works outward from a basic question
• Dialogue mapping = issue mapping + dialogue
• Questions / ideas / pros, cons / action items
Using IBIS

• IBIS is a language for structured thinking that allows us to
  – Move forward on an issue
  – Illustrate the logic behind our thinking
  – Share the process and understanding with others
  – Reach robust decisions
Using Compendium

• Compendium is the software designed for use with IBIS
• Web-based data software
• Other mapping software can be used
  – SimpleMind
  – MindMeister
Types of questions

• Deontic (What should we do?)
• Instrumental (How should we do it?)
• Criterial (What are the criteria?)
• Conceptual (What does ‘X’ mean?)
• Factual (What is X? Is X true?)
• Background (What is the background to this problem?)
• Stakeholders (Who are they?)
• Future (What will happen...?)

(Adapted from, Cognexus, 2010. p.29-30)
Example of health inequalities

• How can we reduce health inequalities?
• What are our targets?
• What do we mean by health inequalities?
• What sectors need to be involved?
• What are the numbers on inequalities?
• What has been tried elsewhere?
• What will happen if we do nothing?
• How will we measure success?
Example of health inequalities
What can be done to reduce health inequalities in Canada?

- Reduce poverty
  - Poverty is related to virtually all other determinants of health
  - It can be done to virtually all other determinants of health

- Increase minimum wage
  - Politically unpopular

- Institute a living wage policy
  - Would allow full time workers to reach the poverty line
  - Cost too high to businesses

- Remove lower limit tax exemptions for higher income earners
  - This would raise the level of income of those at the bottom of the ladder and improve health outcomes

- Allow for a market-determined economy while supporting those at the bottom of the socioeconomic ladder

- Institute a guaranteed annual income
  - Unpopular with most political parties in Canada
  - Goes against basic values in support of progressive income taxation

- Increase social welfare
  - The homeless
  - The extremely poor
  - Would lead to a complete dismantling of welfare state institutions
Issue mapping with SimpleMind
Policy/program ideas to reduce health inequities:

Q - question (of precision, of definition, etc.)
Identify key actors in the effort to reduce health inequities
Suggest 3-4 policies/programs to reduce health inequities and 2 arguments for and against.
Strategies for coping with wicked problems

• Key ingredients
  – Collaboration
  – Dialogue
  – Shared Understanding
Conclusion / Summary

• Most public policy problems are wicked in nature.
• Wicked problems must be tackled differently than tame or complex problems.
• Focus on collaboration, dialogue and shared understanding.
• « Mapping » issues and dialogues can be useful in reaching decisions on how to tackle wicked problems within complex adaptive systems.
References


Thank you!

Visit us at www.ncchpp.ca for more resources

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