Equity-driven Evaluation and Knowledge Translation in Community-based Decision-making for Health

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Overview

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  • Participatory & Community-based processes
  • Knowledge Translation
  • Northern BC windows

• Stakeholders & Social Network

• Social Dynamics

• Participatory Evaluation Tool

• The Machala Model for Knowledge Translation

• Conclusions
Social Determinants of Health

• Wider definition of health
  – Ecological, Biological, Social, Political, Cultural
  – EcoHealth, OneHealth, Eco-Bio-Social

• Determinants: forces & dynamics
  Inequitable distribution of resources, health, security, and services

• Equity = Justice

WHO Commission (2008)
Social Determinants of Health

Source: Dahlgren and Whitehead, 1991

http://www.who.int/social_determinants/en/
Participatory & Community-based Processes

• Equitable participation of stakeholder groups
  – Complex issues require multi-faceted vision

• Power-sharing
  – Marginalized groups
  – “vulnerable” populations

• Equitable community participation throughout the life of the work (PAR, CBAR)

• Trans-, multi-, interdisciplinary
Knowledge Translation

- Intersectoral collaboration
  - Who? What? How?

- KT as outlined by CIHR:
  - dynamic, iterative, ethically-sound
  - Synthesis
  - Dissemination
  - Exchange
  - Application

- Calls for a greater emphasis on Equity in KT and Knowledge-to-Action processes
Knowledge Translation + Evaluation

Graham 2006
Setting the scene: Dengue fever

- Mosquito-borne viral disease
Social-Ecological Interface: Dengue

- Mosquito lives in and around homes
- Poor infrastructure
- Disease of poverty & Neglected Disease
Northern BC window

• Environmental determinants of health
• Social-ecological systems and influence on health

“Position on the Environment as a Context for Health: an Integrated Settings Approach”

• Resource extraction, watershed management, natural resource stewardship
• Human health, community health, animal health, ecosystem health
“Position on the Environment as a Context for Health: an Integrated Settings Approach”
Dengue in Machala

- Pop 250,000
- Patchy provision of basic services and infrastructure
- High vector indices
- Perpetual risk of epidemic transmission of dengue virus
"Eco-Bio-Social Approach"

**Control**
- 1 home visit per year by vector control staff
- Neighbourhood spraying (truck-mounted)
- In-home spraying (backpack sprayer)
- Temephos larvicide

*Reactive program*

**Intervention**
- Clean Patio & Safe Water Storage Program
- Dengue Camp School Program
- Temephos or Biolarvicide

*Participatory Prevention*
Questions

How do current knowledge management strategies limit equitable participation and where are there opportunities to change?

a) Who are the stakeholders involved in and affected by participatory dengue prevention and control programs in Machala and how do they interact within that context?

b) How do the interactions between stakeholder groups and the perceptions they have of one another affect evaluation, knowledge translation and research-to-policy processes?

c) Are new tools, strategies and models required to support more equitable evaluation and knowledge translation processes? If so, what do they look like?
Community

Community participants and residents:

• **as the source of knowledge and experiential understanding of** how and why health, security and the absence of either or both exist and persist in communities

• **as the holders of** narrative, culture and story that shape conceptions of health

• **as the recipients or audience of** KT cycles, health and sanitary education, and recipients of services
Local Government

Neighbourhood Councils and Presidents:

• *gatekeepers for access* to the community in terms of service provision, epidemiological surveillance and monitoring, social mobilization and community health programming

• *negotiators and liaisons* between neighbourhood residents and Provincial Ministries and the Municipal Government
Front-line workers

• the face of government programs and services, allies who care for communities and their health, and who provide an interface or access point to communication with the government in terms of voicing experiences and receiving official information

• basic tool for service delivery and data collection

• a valuable pool of human resources upon which the success of programs deeply depends
Government Administrator

- *leaders with political vision* for the benefit of citizens who are taking steps, to the best of their ability under current political and economic restrictions, to work practically to make positive changes in the lives of the people

- *out-of-touch bureaucrats* who have lost the ability to understand the reality of life in Machala

- *governors of the most reliable channels* through which to affect social and political change
Researchers

• *outside experts* with an objective point of view

• *intermediaries* between dissonant stakeholder groups, as well as facilitators of intersectoral collaboration and construction of intersectoral spaces

• *relatively unbiased bodies* available and able to improve evaluation and follow-up activities, and create or increase local capacity to sustain these improved activities
Social Dynamics

• Dengue as a priority among many
  – Lack of water, roads, sewers and policing
  – Hypertension, diabetes
  – Tuberculosis
  – Influenza, pneumonia, rubella, measles
  – Violence, sexual abuse, addiction, sex & drug trade
Social Dynamics

• Paternalism / equitable participation
  – Paternalistic programming
  – Disempowering messaging
  – Needs not met

“Often we call on the communities only to inform them of what we will do, but not to share the results.” – Government Administrator Key Informant Interview

“This is the difficulty, then. I mean, we can’t reach our goals because we are at the bottom and the authorities are at the top.” – Community resident focus group
Social Dynamics

• *Quemeimportismo / Social resentment*
  
  – Fixed perception that community is apathetic, uneducated or “lacking correct motivation”
  
  – Communities express dissatisfaction with paternalistic programming through non-participation

“*I mean, the top authorities never go out into the places affected [by their decisions] to ask questions, to give educational talks, hold meetings to learn about the issues, the epidemics that exist in the communities.*” –Community Resident Focus Group
Northern BC window

• Changing landscapes of health authorities in the face of persistent and complex lived health inequities by aboriginal peoples in BC, across Canada, and globally

• First Nations Health Authority

• VP Aboriginal Health, Northern Health

Changing knowledge valuation systems, and finding ways of equitably incorporating diverse knowledges for processes of growth, transformation and extension of services
Northern BC window

- Established and growing successes
  - Central Interior Native Health Society
  - Nak’azdli Health Centre
  - Prince George Native Friendship Centre
  - Positive Living North
  - Health Arts Research Centre

- A diversity and multiplicity of success with deep commitment to rootedness with community
### Participatory Evaluation Tool

#### 4 Gross categories
- **Cost**
- **Efficacy**
- **Acceptability**
- **Sustainability**

#### Using interview, focus group and meeting data:
- 14 sub categories
- 48 criteria

#### Community-driven
Hierarchical Indicator Clustering

Dendrogram

- Inspectores EC10
- Médicos EC12
- Funcionarios SNEM EC11
- Movil SNEM EC17
- Combustible EC18
- Materiales Educativas EC21
- Serv Basicos EC59
- Seguimiento cont EC78
- Mejor ambiente barrio EC61
- Financiero EC76
- Tapas para tanques EC22
- IndEpi EC27
- Incidencia EC37
- Casos confirmados EC18
- Frec Brote EC39
- PEP EC49
- HH EC38
- Fito limpio EC33
- Tanques tapados EC34
- Chip Behav EC35
- Partic Casa EC53
- Partic Cambio hábitos EC53
- Moli vehículos EC15
- Municipio vehículos EC16
- Ideas Comunicado EC66
- Implementación EC77
- Num grupo EC68
- Frec actividades EC69
- Partic Mtq EC51
- Récip Pelle EC51
- Convenios EC70
- Inclusión com políticas EC74
- Cons acusa resp EC72
- Cant grupo com EC73
- F2F open EC56
- Fam Com cambioEC55
- Hit ctad cambio EC58
- Open Com lead EC47
- Open mtLC48
- Polít cambio EC57
- Com TV Rad Peri EC80
- Com Mtq EC81
- Com folleto EC82
- Estimuladores para la comunidad EC13
- Refrigerios EC23
- Trípticos EC20
- Opin surv EC49
Evaluation Categories

Operational sustainability:

- Original cost and sustainability categories
- Pertain to the infrastructure required to sustain the function of a participatory dengue prevention and control program
- Human resources; policy, operational and basic services infrastructure.

Effectiveness:

- Original assigned to efficacy and acceptability categories
- Pertain to entomological and epidemiological risk reduction through positive behaviour change at the household and community levels.
Evaluation Categories

Resilience & Responsiveness:
– Original cost, efficacy, acceptability and sustainability categories
– pertain the ability to respond to the changing demands of dengue risk and community needs through equitable, timely evaluation and knowledge translation processes

Engagement Facilitators:
– Original cost, acceptability and sustainability categories
– “Least agreed upon” in terms of assigned importance between stakeholder groups
– may force engagement and negotiation in program design and decision-making processes.
Knowledge Translation + Evaluation
Machala Model for KT

1. Identifying Stakeholders
2. Cultivate Contextual Understanding
3. Assess Barriers and Bridges to Equitable Collaboration
4. Design Interventions, Tools, Strategies
5. Implement and Refine Interventions
6. Participatory Evaluation of Performance and Impact
7. Sustain Intersectoral Collaboration
KT processes & Evaluation

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Knowledge Gathering (Issue)

Knowledge to Action Process
- Monitor Knowledge Use
- Evaluate Outcomes
- Sustain Knowledge Use

Knowledge Creation
- Identify Problem
- Identify, Review, Select Knowledge
- Action Cycle (Application)
- Adapt Knowledge to Local Context
- Assess Barriers to Knowledge Use
- Tailoring Knowledge
- Knowledge Tools/Products
- Knowledge Synthesis
- Knowledge Inquiry
- Select, Tailor, Implement Interventions
Northern BC window

• Resource extraction and economic development plans for Northern BC are fraught with power-sharing and knowledge-valuation issues.

• Pushes toward “Health-in-all-Policies” and gold standards of evidence-based practice and policy should move us to ask:

“*What kind of knowledge is considered evidence, who is open to it, and what determines its usefulness*?”
Conclusions

• Stakeholder groups are not reliable predictors of opinions and perceptions

• Evaluation of participatory dengue prevention and control should reflect the day-to-day reality of program implementation

• Equitable participation is not ensured with intersectoral collaboration

• Equity-focused KT model should support improved equitable participation and allow for stakeholder-driven innovation
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