Community-Level Theory and Practice

Integrating Social and Behavioral Theories into Public Health
### Berkman, Glass, Brissette, Seeman model

<table>
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<th>Upstream</th>
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<th>Individual</th>
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Characteristics of structural interventions

• Relative to individual choice
  – Some less dependent on individual decisions to act
    • Constrain choices
  – Some add new choices

• Generally focus on “shifting the curve” rather than changing the distribution
  – Less attention to “bad apples”
Who is “targeted” in structural interventions?

• Decision-makers
• “End users”
  • Change their own choices and environment
  • Empower them to advocate for themselves
• Communities
  – How to define?
  – How different from a “grass roots” group that comes together around a particular issue?
# Characteristics of Types of Communities

<table>
<thead>
<tr>
<th>Community characteristic</th>
<th>Aboriginal</th>
<th>Geographic/Political</th>
<th>Religious</th>
<th>Disease</th>
<th>Ethnic/Racial</th>
<th>Occupational</th>
<th>Virtual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common culture and traditions, cannon of knowledge, and shared history</td>
<td>++</td>
<td>+</td>
<td>++</td>
<td>+/-</td>
<td>+</td>
<td>++</td>
<td>+</td>
</tr>
<tr>
<td>Comprehensiveness of culture</td>
<td>++</td>
<td>+/-</td>
<td>++</td>
<td>-</td>
<td>+</td>
<td>+/-</td>
<td>-</td>
</tr>
<tr>
<td>Health-related common culture</td>
<td>++</td>
<td>+</td>
<td>+</td>
<td>++</td>
<td>+</td>
<td>+/-</td>
<td>-</td>
</tr>
<tr>
<td>Legitimate political authority</td>
<td>++</td>
<td>++</td>
<td>+/-</td>
<td>-</td>
<td>-</td>
<td>++</td>
<td>+/-</td>
</tr>
<tr>
<td>Representative group/individuals</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>+</td>
<td>+</td>
<td>+/-</td>
<td>+/-</td>
</tr>
<tr>
<td>Mechanism for priority setting in health care</td>
<td>+</td>
<td>+</td>
<td>+/-</td>
<td>+</td>
<td>+/-</td>
<td>+/-</td>
<td>-</td>
</tr>
<tr>
<td>Geographic localization</td>
<td>+</td>
<td>++</td>
<td>+/-</td>
<td>+/-</td>
<td>+/-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Common economy/shared resources</td>
<td>++</td>
<td>++</td>
<td>+/-</td>
<td>+/-</td>
<td>+/-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Communication network</td>
<td>++</td>
<td>+</td>
<td>+</td>
<td>+/-</td>
<td>+/-</td>
<td>+</td>
<td>++</td>
</tr>
<tr>
<td>Self-identification as community</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>+/-</td>
<td>+/-</td>
<td>+/-</td>
<td>+</td>
</tr>
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</table>

++ The community nearly always or always possesses the characteristic. + The community often possesses the characteristic. +/- The community occasionally or rarely possesses the characteristic. – The community very rarely or never possesses the characteristic.
What are the characteristics of a strong community?

Community capacity framework (Goodman et al., 1998)

- Participation and leadership
- Skills
- Resources
- Community values
- Sense of community
- Social and inter-organizational networks (including means of communication)
- Understanding of community history
- Capacity for “critical reflection”
Why think about communities?

• Social justice
  – Empower communities
    • “Action research,” “critical consciousness,” “culture of knowledge”
    – “Targets” should have a voice
• Utilitarian ends
  – Consideration of context more effective
• Access and substituted consent
  – Western and other cultures

Kurt Lewin
1890-1947
The community perspective

• Organized around social units of identity rather than disease or other interest categories
• Emphasis on social analysis rather than (or in addition to) epidemiologic analysis
• Goal of social change rather than social control
• Recognition of community members’ role in issue selection
• Asks “what are people’s motivations?” rather than “how can we motivate people?”
• Focus on assets and weaknesses rather than problems and risks
Community-Based Participatory Research

CBPR is not one specific theory or methodology, but an overarching term useful for understanding the community-based approach. Tenets include:

• Community participation
• Cooperation and co-learning between community members and professionals
• Process orientation toward capacity building and empowerment
• Compromise between investigation and action

(Israel et al., 1998)
Placed-participatory continuum

• Most common community roles
  – Recruiting participants
  – Design of studies

• Probably most important roles
  – Data interpretation and development of implications and significance
    – (Cashman 2008)
## Range of “community-based activities”

<table>
<thead>
<tr>
<th></th>
<th>Research focus</th>
<th>Justice/action focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community placed</td>
<td>+++</td>
<td>-</td>
</tr>
<tr>
<td>CBPR</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Community organizing</td>
<td>-</td>
<td>+++</td>
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</table>
Community Organizing

“The process by which community groups are helped to identify common problems or goals, mobilize resources, and in other ways develop and implement strategies for reaching the goals they have collectively set.” (Minkler & Wallerstein, 2002)
Staged/cyclic approach

- Lewin’s action research
  - Factfinding, action, reflection
- Organizing
  - Listen
  - Build relationships
  - Challenge status quo
  - Act
  - Evaluate
  - Reflect
  - Celebrate
  - Listen
The process

• Define it
  – Agree on an issue, build consensus

• Analyze it
  – Do homework in the library, web, etc.

• Document it
  – Diaries, photos, films
  – Track changes
The process

• Prioritize it
  – Rank concerns
  – Rank desired solutions
  – Communicate the problem and the solution to those in power

• Evaluate it
  – Monitor the impact of any changes
Baltimore Environmental Justice in Transportation

Comm+Unity from http://ejkit.com
Kirk Ave. Bus Yard

Community concerns

• Bus yard is too close to homes
  – It is 1 of 3 MTA bus yards located in/near residential areas.
  – Concerns about noise, impact of fumes on respiratory conditions and cancer
  – Concerns about property values
Analysis/findings

• Noise pollution tracked at bus yard:
  – Announcements over loud speakers
  – Engines running throughout day and night
  – Recorded noise levels exceeded the Baltimore City ordinance levels during both day and night, nearly every day tested. Noise levels were higher during night hours, especially on weekends.
Analysis/findings

• Pollution
  – Although the daily average of air pollution didn’t exceed the federal standard, the 2 week average indicates that the annual standard may be exceeded.
  – Related illnesses and doctor/hospital visits were documented and mapped.

• Property Values
  – Property values are lower in the 1/4 mile residential area surrounding the yard
Analysis/findings

• But, the yard does serve the community
  – Some of the bus routes leaving from Kirk Ave. directly serve the Midway Community.
    • Of the 12 bus routes that leave the Kirk Ave bus yard, 4 are within a 1/2 mile radius of Kirk Ave and 2 are within 1 mile.
      – The presence of the yard helps make public transit in the area better than it might be
  • Thus, getting rid of the yard not best option
Action/plans

- Noise and pollution reduction (hybrid buses, new operational procedures, etc) advocated over relocation
- Community should have ongoing, structured, negotiations with MTA regarding near-term and long-term strategies
Key questions

• Where does the question come from?
• Who owns the data and why does this matter?
• An essentially cross-cultural process
  – Time scales
  – Unstated assumptions
  – Humble knowledge
  – Who can be a bridge?
To what extent do community theories “work”?

- Results of large-scale community-based health promotion programs have often been modest (e.g., Minnesota Heart Health, Stanford Five City Project)
- Disagreement exists about the extent to which these are actually community-based
- Better results have been found in HIV research and with smaller-scale interventions
- Proponents emphasize the moral argument for community based research
Effectiveness of community-based work

- Holder et al. (2000) multi-level community-based trial:
  - Health problems addressed
    - High-risk drinking
    - Alcohol-related motor vehicle crashes
  - Interventions
    - Server training
    - Training of off-premises licensed retailers
    - Enhanced roadside sobriety checks
    - Community mobilization (norms)
    - Use zoning to limit/restrict alcohol outlets
<table>
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<tr>
<th>Intervention</th>
<th>Preintervention, April 1992 to June 1993</th>
<th>Phase 1, July to December 1993</th>
<th>Phase 2, January to December 1994</th>
<th>Phase 3, January to March 1995</th>
<th>Phase 4, October to December 1995</th>
<th>Postintervention, January to December 1996</th>
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<tr>
<td>Community mobilization</td>
<td>Local staff development and technical assistance</td>
<td>Component task force organized Media mobilization efforts to draw attention to problems</td>
<td>Continued local activity</td>
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<tr>
<td>Risk of drinking and driving</td>
<td>Support of city councils and police departments obtained Police equipped and trained for special DUI patrols Special DUI patrols begun</td>
<td>Full enforcement of activities in place with random roadside checkpoints</td>
<td>Continued local activity</td>
<td>Continued local activity</td>
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<tr>
<td>Access to alcohol</td>
<td>Support of city councils and planning and zoning departments obtained</td>
<td>Restriction on alcohol availability at special events Beginning of intense license review, denials, and revocations</td>
<td>Initiation of new licensing regulations with planning and zoning department</td>
<td>Implementation of new distance regulations between outlets and public places (e.g., schools, parks)</td>
<td>Continued local activity</td>
<td>Continued local activity</td>
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<tr>
<td>Responsible beverage service</td>
<td>Local responsible beverage service implementation designed</td>
<td>On-site server training programs begun On-site stings begun</td>
<td>Continued local activity</td>
<td>Continued local activity</td>
<td>Continued local activity</td>
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<tr>
<td>Underage drinking</td>
<td>Off-site server training programs begun Youth access surveys begun and results fed back to communities</td>
<td>Police enforcement operations against underage sales</td>
<td>Continued local activity</td>
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Effectiveness of community-based work

• Holder et al. community trials:
  – Case/control study – three communities, three controls
  – Results
    • Overall prevalence of drinking did not decline
    • “Having had too much to drink” self-reports down 49%
    • Self-reported “driving over legal limit” fell by 51%
    • 6% drop in driving after drinking crashes
    • 10% drop in nighttime injury crashes
    • Assault injuries appearing in ER fell by 43%
    • All hospitalized assault injuries fell by 2%

_Holder HD: JAMA. 2000;284:2341-2347._
Crashes: Nighttime Injury, Driving Under the Influence (DUI) of Alcohol, and Daytime View Figure 1 from Holder, H. D. et al. JAMA 2000;284:2341-2347: http://jama.ama-assn.org/cgi/content-nw/full/284/18/2341/FIGJOC90970F1
Summing up

• Thoughts about communities and community-based interventions and research?
• Small group sessions – elements of “the pitch”