Writing on the Wall: The Effects of Neighborhoods on Teen Reproductive Health

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Presenter Disclosures
Mara Decker
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Photo: Operation Samahan
Agenda

- Background
  - Teenage pregnancy at the national and state level
  - Conceptual framework
- Literature review
  - Methods
  - Findings

Background

- Teenage pregnancy at the national and state level
- Conceptual framework

California and U.S. Teen Birth Rates, 1991-2010


Reproductive health: A confluence of factors

Neighborhood Effects

- Four classes of neighborhood mechanisms:
  - Social ties/Interactions
  - Norms and collective efficacy
  - Institutional resources
  - Routine activities

(Sampson, R. J., et al., 2002)
Neighborhood Effects

Individual and neighborhood factors

<table>
<thead>
<tr>
<th>Individual</th>
<th>Neighborhood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race/ethnicity</td>
<td>Neighborhood composition (e.g., % Hispanic in census tract)</td>
</tr>
<tr>
<td>Family income</td>
<td>Neighborhood poverty (Proportion of families below poverty level)</td>
</tr>
<tr>
<td>Education level</td>
<td>Neighborhood education status (Proportion of adults aged 25+ w/ college education)</td>
</tr>
<tr>
<td>Arrested/detention</td>
<td>Community arrest rate</td>
</tr>
<tr>
<td>Employed</td>
<td>Labor force participation</td>
</tr>
<tr>
<td>Violence (hit by partner)</td>
<td>Ambient hazards</td>
</tr>
<tr>
<td>Acculturation (time in the US)</td>
<td>Proportion immigrants</td>
</tr>
</tbody>
</table>

LITERATURE REVIEW
Study design: literature review

- Systematic search: PubMed, Web of Science, JSTOR
  - Reviewed references in other articles
  - Published between 1990-2011
- Three outcome variables:
  - Teen pregnancy
  - Sexual initiation
  - Contraceptive use
- Only included studies with sub-county geographic units (census tract, zip code)
- 22 quantitative studies met search criteria (out of 50)

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Neighborhood factors associated with teenage pregnancy

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Example</th>
<th>Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty</td>
<td>% of population living below FPL</td>
<td>+</td>
</tr>
<tr>
<td>Affluence</td>
<td>Neighborhood affluence</td>
<td>–</td>
</tr>
<tr>
<td>Education status</td>
<td>Proportion of adults 25+ with college education</td>
<td>–</td>
</tr>
<tr>
<td>Neighborhood composition</td>
<td>&gt;50% Hispanic in census tract Increasing % of a given racial/ethnic group</td>
<td>+</td>
</tr>
<tr>
<td>Collective efficacy</td>
<td>In neighborhoods with &lt;50% Hispanic (unmarried TBR) In neighborhoods with &gt;50% Hispanic (married TBR)</td>
<td>–</td>
</tr>
<tr>
<td>Safety</td>
<td>Community arrest rate (African American)</td>
<td>+</td>
</tr>
<tr>
<td>Residential stability</td>
<td>Home ownership</td>
<td>–</td>
</tr>
</tbody>
</table>

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Neighborhood factors associated with sexual initiation

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Example</th>
<th>Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty</td>
<td>% of population living below FPL</td>
<td>+</td>
</tr>
<tr>
<td>Affluence</td>
<td>% households income &gt;$75,000 (boys)</td>
<td>–</td>
</tr>
<tr>
<td>Education status</td>
<td>Proportion of adults with &gt;16 years education</td>
<td>–</td>
</tr>
<tr>
<td>Neighborhood composition</td>
<td>% married households Proportion foreign born % African American &gt;15% Hispanic</td>
<td>–</td>
</tr>
<tr>
<td>Employment</td>
<td>Full time female labor force</td>
<td>+</td>
</tr>
<tr>
<td>Youth idleness</td>
<td>Proportion of all adults unemployed</td>
<td>+</td>
</tr>
<tr>
<td>Collective efficacy</td>
<td>Proportion who are school dropouts and not working</td>
<td>+</td>
</tr>
<tr>
<td>Safety</td>
<td>Higher levels of ambient hazards</td>
<td>+</td>
</tr>
</tbody>
</table>
### Neighborhood factors associated with contraceptive use

<table>
<thead>
<tr>
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<th>Example</th>
<th>Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty</td>
<td>% of population living below FPL (use at last sex, boys)</td>
<td>+</td>
</tr>
<tr>
<td>Affluence</td>
<td>Median income (use, girls)</td>
<td>+</td>
</tr>
<tr>
<td>Neighborhood composition</td>
<td>% adult females divorced or separated (use, girls)</td>
<td>−</td>
</tr>
<tr>
<td></td>
<td>% Hispanic (use at last sex, boys)</td>
<td>−</td>
</tr>
<tr>
<td>Employment</td>
<td>Female labor force opportunities</td>
<td>+</td>
</tr>
<tr>
<td>Collective efficacy</td>
<td>Neighborhood cohesion (condom use)</td>
<td>+</td>
</tr>
</tbody>
</table>

### Limitations

- Geographic variables
  - Census tracts and zip codes
  - Defining “neighborhoods”
- Differing definitions
  - Sexual initiation: ever had sex, age at first sex
  - Neighborhood cohesion, efficacy
- Distinguishing between effect of family and neighborhood socioeconomic characteristics

### Discussion

- Measurement challenges
  - Defining neighborhood boundaries
  - Measuring dynamic social processes
- Differences in effect by gender
- Difference by race, ethnicity, and immigration
- Policy and program implications
  - Focusing on high-need areas
  - Recognizing and adapting to specific neighborhood context
Studies reviewed


Studies reviewed, continued