Assessing the impact of SNAP-Ed census-tract targeting on access to nutrition programming for low-income individuals

Vanessa Buchthal, DrPH; Daniel Alexander, MSP; and Laura Hsu, DRPH
University of Hawai’i at Mānoa Office of Public Health Studies, University of Hawai’i at Mānoa Department of Urban and Regional Planning

BACKGROUND

Hunger, obesity, and chronic disease disproportionately affect low-income communities; the USDA SNAP-Ed program recognizes that low-income communities need support for improved nutrition.

Existing SNAP-Ed program guidelines restrict community-based nutrition programming/social marketing for low-income audiences to areas of highly concentrated poverty, defined as:
- Offices that directly serve only SNAP participants
- Schools where >50% of students are eligible for free lunch
- Community locations where >50% of attendees have documented incomes >185% of the federal poverty level (FPL)
- Census tracts where >50% of the population is >185% FPL

SNAP-Ed program staff identified these targeting restrictions as a major barrier to implementing effective community-based nutrition campaigns for low-income families.

Concern that these restrictions disproportionately excluded low-income families in smaller/rural states from the benefits of community-based nutrition campaigns.

However, no data existed documenting this burden.

OBJECTIVES

- Identify % of all low-income households nationally and by state that could be reached through services in SNAP-Ed qualified (>50% of population <185% FPL) census tracts.
- Document disparities in ability to serve states’ low-income populations using existing targeting guidelines.
- Identify factors associated with these disparities
- Test an alternate targeting methodology in a state where census-tract targeting is ineffective.

METHODS

US Census’s 2009 5-year American Communities Survey poverty data for every census tract in the nation used to calculate:
- % of low-income individuals in state (<185% FPL)
- % of low-income individuals in tracts w/>50% <185% FPL
- Correlation between % of low-income individuals in census tracts with >50% <185% FPL, and urbanicity, poverty, and population size.

Alternate methodology tested in Hawai’i:
- Locally-understood boundaries defined geographic communities
- # of individuals <185% FPL within each community boundary calculated using Census data.
- 10 communities with greatest numbers of individuals <50% FPL defined as target area.
- Difference in state reach between census tract targeting and low-income community targeting assessed.

RESULTS

Geographic disparities identified in ability to reach low-income population within state using census tract targeting

<table>
<thead>
<tr>
<th>Correlation coefficient</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population size</td>
<td>r=.424</td>
</tr>
<tr>
<td>Poverty level</td>
<td>r=.661</td>
</tr>
<tr>
<td>Urbanicity</td>
<td>r=.127</td>
</tr>
</tbody>
</table>

Use of the alternate methodology improved reach in Hawai’i from 6% to 50%.

CONCLUSIONS

Targeting low-income individuals by census tract alone may results in poor reach, particularly in states with smaller populations and lower poverty levels.

Targeting by the proportion of state’s low income population within locally-defined community boundaries can improve reach substantially.