Best Practices and Innovative Solutions to Overcome Barriers to Delivering Policy, Systems and Environmental Changes in Rural Communities

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Study Purposes

• To understand barriers to implementing SNAP-Ed programming in rural communities.

• To identify strategies that SNAP-Ed implementing agencies (IAs) and staff have employed in rural communities to overcome PSE and traditional programming barriers.
Why Focus on Rural Communities?

Why SNAP-Ed?

- **Why Focus on Rural?**: Individuals living in rural areas are more likely to be obese and eat fewer fruits and vegetables than those living in urban areas.

- **Why SNAP-Ed?**: SNAP-Ed is a federally funded nutrition education program that is available in many areas of most states, and is a resource for rural areas.
  
  - However, recruiting participants to attend SNAP-Ed classes can be challenging in rural areas, due to transportation, time, and lack of convenience.
Methods
Defining “Rural”

Source:
USDA, Economic Research Service using U.S. Census Bureau Data
Study Methods

• Mixed methods approach (quantitative and qualitative data)

• Recruited staff at SNAP-Ed programs to complete online survey by using the Nutrition and Obesity Policy Research and Evaluation Networks and Association for SNAP Education Nutrition Administration listservs

• Survey respondents had the opportunity to volunteer to participate in interviews if they:
  1. Were a SNAP-Ed staff member that personally engaged in implementing programs in the community
  2. Worked for SNAP-Ed program that provides at least 50% of their programming in rural communities
  3. Worked in their role for at least 12 months
## Survey & Interview Questions

### Surveys
- Rate level of knowledge with PSE approaches to behavior change
- Rate level of experience with PSE approaches to behavior change
- List types of community settings where PSE was implemented
- List what types of partners helped to implement PSE

### Interviews
- Describe general experience with SNAP-Ed
- Describe different types of SNAP-Ed programming currently being implemented
- Types of PSE initiatives involved with
- Barriers to implementing SNAP-Ed programming
- Facilitators to implementing SNAP-Ed programming
- Major issues rural communities face related to opportunities for eating healthy and physical activity
Analysis

- For quantitative surveys, descriptive statistics were calculated to determine frequencies of various responses.
- Qualitative interviews were transcribed verbatim and analyzed using Atlas.ti version 7.0.
- Created a codebook from 2 coders independently coding a subset of three interviews.
- Two coders then independently applied codes to all interview transcripts.
- Final themes were compiled based on questions included on the interview guide.
- “Innovative practices” were PSE strategies that were mentioned by only 1 respondent, and “best practices” were those strategies mentioned by more than one respondent.
Results
Survey Results (N=35)

- 85% were knowledgeable/very knowledgeable about PSE
- 60% were experienced/very experienced with implementing PSE

<table>
<thead>
<tr>
<th>SETTING</th>
<th>I work in this setting</th>
<th>Health Departments</th>
<th>Retail food store owners/managers</th>
<th>Food policy councils</th>
<th>Worksite staff</th>
<th>Other</th>
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<tbody>
<tr>
<td>Childcare center</td>
<td>61%</td>
<td>11%</td>
<td>0%</td>
<td>4%</td>
<td>30%</td>
<td>18%</td>
</tr>
<tr>
<td>School</td>
<td>96%</td>
<td>7%</td>
<td>5%</td>
<td>11%</td>
<td>50%</td>
<td>23%</td>
</tr>
<tr>
<td>Workplace</td>
<td>64%</td>
<td>12%</td>
<td>2%</td>
<td>9%</td>
<td>19%</td>
<td>22%</td>
</tr>
<tr>
<td>Senior Center</td>
<td>68%</td>
<td>15%</td>
<td>0%</td>
<td>7%</td>
<td>22%</td>
<td>25%</td>
</tr>
<tr>
<td>Faith-based locations</td>
<td>66%</td>
<td>5%</td>
<td>2%</td>
<td>12%</td>
<td>20%</td>
<td>27%</td>
</tr>
<tr>
<td>Corner store</td>
<td>54%</td>
<td>11%</td>
<td>22%</td>
<td>3%</td>
<td>6%</td>
<td>12%</td>
</tr>
<tr>
<td>Grocery store</td>
<td>53%</td>
<td>7%</td>
<td>26%</td>
<td>2%</td>
<td>4%</td>
<td>14%</td>
</tr>
<tr>
<td>Supermarket/supercenter</td>
<td>24%</td>
<td>2%</td>
<td>10%</td>
<td>2%</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td>Food Pantry</td>
<td>89%</td>
<td>15%</td>
<td>4%</td>
<td>17%</td>
<td>27%</td>
<td>27%</td>
</tr>
<tr>
<td>Farmer's Market</td>
<td>83%</td>
<td>13%</td>
<td>3%</td>
<td>13%</td>
<td>22%</td>
<td>32%</td>
</tr>
<tr>
<td>Other Setting</td>
<td>44%</td>
<td>2%</td>
<td>0%</td>
<td>2%</td>
<td>12%</td>
<td>18%</td>
</tr>
</tbody>
</table>
Interviews with SNAP-Ed Staff
## Interview Participant (n = 27) Demographics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of years working for SNAP-Ed</td>
<td></td>
</tr>
<tr>
<td>0–2</td>
<td>40.7%</td>
</tr>
<tr>
<td>3–5</td>
<td>22.2%</td>
</tr>
<tr>
<td>6–10</td>
<td>11.1%</td>
</tr>
<tr>
<td>&gt;10</td>
<td>18.5%</td>
</tr>
<tr>
<td>Age (average)</td>
<td>39</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>7.4%</td>
</tr>
<tr>
<td>Female</td>
<td>81.5%</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>70.0%</td>
</tr>
<tr>
<td>Native American/American Indian</td>
<td>3.7%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>7.4%</td>
</tr>
<tr>
<td>African American or Black</td>
<td>7.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Conducted in Rural Communities</td>
<td></td>
</tr>
<tr>
<td>25–50%</td>
<td>18.5%</td>
</tr>
<tr>
<td>51–75%</td>
<td>14.8%</td>
</tr>
<tr>
<td>&gt;75%</td>
<td>94.1%</td>
</tr>
<tr>
<td>PSE Work</td>
<td></td>
</tr>
<tr>
<td>&lt; 25%</td>
<td>22.2%</td>
</tr>
<tr>
<td>25–50%</td>
<td>18.5%</td>
</tr>
<tr>
<td>51–75%</td>
<td>14.8%</td>
</tr>
<tr>
<td>&gt;75%</td>
<td>37.0%</td>
</tr>
<tr>
<td>Direct-Ed Work</td>
<td></td>
</tr>
<tr>
<td>&lt; 25%</td>
<td>51.9%</td>
</tr>
<tr>
<td>25–50%</td>
<td>14.8%</td>
</tr>
<tr>
<td>51–75%</td>
<td>14.8%</td>
</tr>
<tr>
<td>&gt;75%</td>
<td>11.1%</td>
</tr>
</tbody>
</table>
Overall Results

- The most common PSE initiatives mentioned were gardens, school wellness-based initiatives, healthy food retail, farmers’ markets, and food pantries.
- Challenges were funding, and level of PSE understanding among SNAP-Ed staff and stakeholders.
- Strategies to overcome these challenges included working through partnerships and finding short-term PSE wins to demonstrate the importance of this approach to behavioral change.
Gardens

• Basic gardening skills, bee keeping and composting

• Setting-specific barriers:
  • Weather
  • Competing for time with schools’ curriculum standards.

• Best practices: Encouraging all schools to have a garden (making it the cultural norm) and support from the community.

• Innovative solutions: Work meetings in the garden to raise awareness.
  • “Our educator partnered with Extension and they helped tell her (worksite owner) what kind of plants grow well there and taught her about companion plants ...And she partnered with other agencies so they could have working meetings and actually work in the garden while they were discussing business.”
School Wellness

- Smarter lunchrooms, farm-to-school projects, school gardens, and taste tastings.
- Barriers: Competing for class time and lack of buy-in from school principals or teachers.
- Best practices: Created programs that did not require teacher participation and ask school leadership to choose which PSE initiative(s) they wanted to implement.
- Innovative solutions: Converted an old and outdated pool into a garden and converted the pool house for produce processing, and tool and lumber storage.
Healthy Food Retail

• New signage to direct people towards healthier food items, ads for healthy food specials, and creating healthy food check-out lines.

• Barriers: Lack of buy-in from store owners, difficulty measuring impact, ensuring signage and inventory continued.

• Best practices: Regular communication with owners to highlight how small, no or low cost changes could improve the community’s diet and health.

• Innovative solutions: Encouraged bundling healthy foods with high demand foods and working with an independent grocery store owner to develop a mobile grocery store to increase access to healthy food in areas with limited access.
Farmers’ Markets

• Encouraging farmer’s markets to accept SNAP/EBT, food tastings and cooking demonstrations, hand-outs with recipes or health tips.

• Barriers: Some communities did not have farmer’s markets, so SNAP-Ed staff worked on trying to create one.

• Best practices: Partnering with other organizations to implement incentive programs.

• Innovative solutions:
  • “One of the PSE changes that we did put in place at our farmer’s market was demonstrating healthy recipes utilizing some of the fruits and vegetables that were being featured there that week, so anybody that came in and did a food demonstration had to serve fruits and vegetables...Water is served as the beverage of choice there, whereas before they may have been doing punch...”
Food Pantries

• Nudging customers towards healthier foods and using the client choice model.

• Barriers: Lack of buy-in from food pantry owners — as they did not want to change food distributions policy.

• Best practices: Working with food pantry owners and managers and moving towards providing healthier food options.

• Innovative solutions: Partnering with a medium-security prison on their produce-growing contest—prisons try to grow the most produce and after the contest, the produce is donated across the community.
Barriers: Funding

- Lack of funding for the amount of programmatic work that needs to be done
- Lack of ability to cover incentives for participants and/or partners

“The biggest barrier is funding because lot of people like these [PSE] ideas, but there’s very little extra money laying around.”
Barriers: Level of PSE Understanding

• SNAP-Ed staff and stakeholders have a lack of understanding PSE and why it’s important

“Even though I’m comfortable with PSE, many of our SNAP-Ed assistants are not. ‘Policy’ is a scary word to them and I think a training to make them feel more comfortable about it, and realize that it’s not always about talking to senators, would be helpful.”
Facilitators: Partnerships

• Partnering with other community initiatives or organizations, building relationships with coalitions, wellness committees, and advisory groups, can help with implementing SNAP-Ed programming.

“One of the advantages of being in a rural place is everybody knows each other, so they have the ability to network and build or enhance partnerships.”
Facilitators: Short-term PSE Wins

• Recognizing the importance of having short term wins to prove that PSE can be an effective strategy for behavior change, this includes being intentional where you work – choosing locations where you think your programming will be successful.

“I think a really helpful strategy is to find a way to plug into things that are already sort of “easy wins” that are already starting or initiated and then trying to help shape and direct them to the more healthy direction.”
Conclusions
Conclusions

- SNAP-Ed PSE initiatives in rural areas included working with schools, gardens, food pantries, farmers’ markets, and food retail settings like corner stores and supermarkets.

- Partnerships and demonstrating short-term PSE wins were important to overcoming barriers.

- Strengths: Geographic variability (SNAP-Ed staff from all seven SNAP-Ed regions) and trained qualitative researchers conduct all interviews, double-code transcripts, and reconcile all codes.

- Limitations: Potential selection bias for those who chose to participate in the interviews.
Thank You to Our Funders!

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  • HTML Version: [http://www.mdpi.com/2072-6643/10/8/1012/htm](http://www.mdpi.com/2072-6643/10/8/1012/htm)
Questions?
Ideas for a joint / cross-site research project:

1. Examining healthy food service guidelines in rural hospitals.
2. Examining distribution chains for small food stores attempting to stock/promote healthier foods.
3. Other?