Applying a RE-AIM Framework to Curriculum Fidelity to Evaluate SNAP-Ed Direct Education in Washington State

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Background

The Supplemental Nutrition Assistance Program – Education (SNAP-Ed) is a nutrition and physical activity education program for people who are eligible to receive SNAP benefits (at or below 185% Federal Poverty). Classroom observations were conducted to compare in-class implementation to curricula instruction by educators. The four most popular curricula were evaluated: Eating Smart, Being Active (ESBA); Choose Health: Fun, Food, Fitness (CHFFF); Plan, Shop, Save, Cook (PSSC); and Pick a Better Snack (Snack).

Objective

To evaluate direct education through a curriculum fidelity monitoring approach by applying the public health systems framework of: reach effectiveness, adoption, implementation and maintenance (RE-AIM).

Methods

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Question</th>
<th>Data Source</th>
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</thead>
<tbody>
<tr>
<td>Reach</td>
<td>In each region, How many people are eligible for SNAP? How many SNAP eligible people are reached through direct education?</td>
<td>FY 2017 State plan</td>
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<tr>
<td>Effectiveness</td>
<td>Did behavior and attitudes change after direct education?</td>
<td>PEARS (Program Evaluation and Reporting System)</td>
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<td>Adoption</td>
<td>How many subcontractors were going to implement each curriculum? How many subcontractors actually used this curriculum?</td>
<td>PEARS State Plan</td>
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<td>Implementation</td>
<td>How well did educators implement curricula? Relationship between curriculum fidelity and change in behavior?</td>
<td>Classroom Observations PEARS</td>
</tr>
<tr>
<td>Maintenance</td>
<td>How can we make evaluation better? Other Improvements or gaps?</td>
<td>Data analysis</td>
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Reach

How many people reached by direct education and what percentage that is of all SNAP-Ed participants in the region.

Region 1 – 19,689 people, 23%
Region 2 – 7,662 people, 5%
Region 3 – 2,233 people, 1%
Region 4 – 16,533 people, 3%
Region 5 – 14,877 people, 4%

Effectiveness

For Washington state, all curricula improved fruit and vegetable (FV) consumption.

- **PSSC** participants (adults) reported increased milk consumption, label reading, healthy protein consumption, better budgeting for food, and decreased soda consumption.
- **ESBA** participants (adults) reported increased healthy protein consumption and decreased sugary beverage consumption.
- **CHFFF** participants (youth) reported thinking physical activity is more fun and more likely to ask parents to buy low-fat milk.
- **Snack** participants (youth) reported increased knowledge about benefits of physical activities and asking parents for FV in the fridge.

Implementation

There was a strong correlation between curriculum fidelity scores measured by in-class observations for given behaviors of **ESBA** and **PSSC**. **CHFFF** and **Snack** yielded zero significant correlations.

- **ESBA**: High curriculum fidelity was related to increased FV consumption as snacks (r=0.7), and to decreased food insecurity (r = -0.5)
- **PSSC**: High curriculum fidelity was related to increased fruit juice, sports drinks, and punch. (r = 0.5)

Adoption

Subcontractors who implemented curriculum/those who proposed using curriculum

<table>
<thead>
<tr>
<th></th>
<th>ESBA</th>
<th>CHFFF</th>
<th>PSSC</th>
<th>Snack</th>
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</thead>
<tbody>
<tr>
<td>Region 1</td>
<td>3/7</td>
<td>4/6</td>
<td>6/6</td>
<td>3/8</td>
</tr>
<tr>
<td>Region 2</td>
<td>1/2</td>
<td>3/4</td>
<td>6/6</td>
<td>0/0</td>
</tr>
<tr>
<td>Region 3</td>
<td>3/4</td>
<td>3/3</td>
<td>1/1</td>
<td>0/1</td>
</tr>
<tr>
<td>Region 4</td>
<td>2/2</td>
<td>3/3</td>
<td>3/3</td>
<td>0/0</td>
</tr>
<tr>
<td>Region 5</td>
<td>2/5</td>
<td>4/4</td>
<td>10/11</td>
<td>2/3</td>
</tr>
<tr>
<td>Total</td>
<td>11/20</td>
<td>17/20</td>
<td>26/27</td>
<td>5/12</td>
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Conclusions – Maintenance

- Increase the number of completed evaluations entered into PEARS.
- Allocate appropriate staff time to analyze data.
- Given the small number of Curriculum Fidelity Monitoring Staff, encourage managers to conduct classroom observations and enter data in a web-based system.

References

- Effective insulin sensitization. Washington State University.
- Supplemental Nutrition Assistance Program (SNAP) Education (SNAP-Ed) Reporting System.
- Evaluation and Reporting System for Education: Results from the貌甩姆 enforcement of the Washington state–based program of the food and beverage and physical activity education and obesity prevention training (SNAP-Ed) program.
- Healthy Eating: High curriculum fidelity was related to increased FV consumption as snacks (r=0.7), and to decreased food insecurity (r = -0.5)
- High curriculum fidelity was related to increased fruit juice, sports drinks, and punch. (r = 0.5)