IMPROVING REFUGEE HEALTH AND SOCIAL CONNECTEDNESS THROUGH CHURCH GARDENS

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Presenter Disclosures

Meghan R. Mason

(1) The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

No Relationships to disclose
Background

- Refugee and immigrants in the United States experience many stressors
- Past traumas of immigrants and refugees may also surface in this transition
- Community gardens have been shown to be therapeutic (physical and mental health benefits to alleviate stressors)

Maller, C. et al. (2006)
Pretty, J., et al. (2005)
Background

- Shortage of community gardens in Twin Cities
- Many refugees are coming from an agricultural background
- Arrive Ministries is a faith-based resettlement program
- We have a lot of churches with large lawns
- Gardens for refugees serve church desires to meet outreach mission
Program description

- Arrive Ministries – refugee placement agency in the Twin Cities of Minneapolis–Saint Paul connected refugees with faith-based community gardens

- In 2014, there were 19 churches serving more than 1,200 refugee and immigrant families

- Finding the right church garden for the right immigrants/refugees takes place through:
  - Karen Organization of Minnesota
  - Bhutanese Community of Minnesota
  - CAPI
Objective of Program Evaluation

What was the impact of the church-based gardening project on the health of the refugee and immigrant gardeners participating in the program?

- Social connectedness
- Physical health
- Mental health
- Economic benefits
Evaluation

- We purposefully selected 8 of the 19 church gardens based on:
  - At least 2 years of participation (churches)
  - Size of garden (small, medium, large)
  - Primary languages of gardeners
    - Karen
    - Nepali

- Evaluation:
  - Surveys July and September 2014
  - Focus groups – September & October
  - Interviews with church volunteers – after harvest

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Survey Tool

- Vegetable intake
- Hunger
- Food subsidy
- Depression
- Social connectedness between gardeners and church members
Survey Response Rate

- 44% (n=94) - early season, 45% (n=96) - post-season
- 64% of all gardeners (n=214) completed both surveys
- Surveys were translated into Karen, Nepali, and provided in English
<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Karen N=67</th>
<th>Bhutanese N=20</th>
<th>Hmong N=4</th>
<th>Lisu N=8</th>
<th>Total N=98</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Age (range)</td>
<td>39 (16 – 69)</td>
<td>40 (25 – 80)</td>
<td>57 (47 – 63)</td>
<td>33 (30 – 38)</td>
<td>40 (16–80)</td>
</tr>
<tr>
<td>% Female</td>
<td>70%</td>
<td>40%</td>
<td>100%</td>
<td>63%</td>
<td>65%</td>
</tr>
<tr>
<td>Average Family Size (range)</td>
<td>6 (2 – 13)</td>
<td>4 (1 – 7)</td>
<td>4 (1–8)</td>
<td>4 (3–6)</td>
<td>5.5 (1–13)</td>
</tr>
<tr>
<td>Years in U.S. (range)</td>
<td>5.5 (1 – 20)</td>
<td>4 (0.6 – 6)</td>
<td>25 (18 – 36)</td>
<td>3.5 (0.7 – 7)</td>
<td>5.7 (0.6–36)</td>
</tr>
<tr>
<td>% Speak English pretty well or fluently</td>
<td>9%</td>
<td>50%</td>
<td>0</td>
<td>14%</td>
<td>18%</td>
</tr>
<tr>
<td>Avg. years gardening BEFORE U.S. (range)</td>
<td>11 (0 – 60)</td>
<td>16 (0 – 50)</td>
<td>12 (0 – 30)</td>
<td>17 (3 – 25)</td>
<td>2 (0–60)</td>
</tr>
</tbody>
</table>
Vegetable Intake

Vegetable Consumption

Proportion responding "yes"

Early Season  Post Season

Eat vegetables everyday

More than one type of vegetable per day

P=0.04

P=0.68
Hunger

➢ Hunger: Early-season questionnaire only
   - “Was there a time in the past month when there was no food in the house?”
   - “Did any individual go to bed hungry in the past month?”

➢ Only three individuals (4%) responded affirmatively
   - Family sizes of 4, 5, and 11
Food Subsidies

- Food subsidies
  - Most received food subsidies (84%)
  - Same in early-season and post-season survey

- Cost savings
  - 34% estimated $25–50 saved
  - 27% estimated $50–100 saved
Depression

- Over the past two weeks, how often have you been bothered by...
  - Little interest or pleasure in doing things?
  - Feeling down, depressed, or hopeless?

- If at least “more than half of the days” recommended for further depression screening
  - Post-gardening survey (18.8% among those who answered)
  - 16 Individuals – 9 Karen, 7 Lisu
  - Respondents did skip this question (21.1%)
Social Interactions

Percentage of respondents participating in these activities with church members or neighbors “sometimes/often”

- Greet one another: P=0.58
- Share a drink: P=0.23
- Share a meal: P=0.01
- Share tools: P=0.02
- Share vegetables: P=0.01

early season  post-gardening
Social Interactions

- Larger gardens v. Small & Medium gardens:
  - smaller decreases in the proportion of participants responding “sometimes/often” for the social interactions

- The presence of church members gardening at the sites v. no church gardeners
  - smaller decreases in the proportion of participants responding “sometimes/often” for the social interactions

- Homogenous v. Heterogeneous gardening site didn’t influence social interaction
Discussion

- Physical health: Vegetable consumption increased
- Decrease in interactions between church members/neighbors and gardeners over time:
  - Immigrants and refugees became more independent
  - Technical support available at the beginning of the season
  - Gardeners came on their own schedule
- Did not have same participants at both survey points
- Mixed method was useful in explaining differences in survey data
- 97% would recommend it to a friend or another new immigrant
Conclusion

- Refugee organizations should consider community gardens as a mechanism for improving health
  - Physical health value (survey)
  - Mental health need (survey), value (focus groups)

- Community garden grants that are inclusive of refugee and immigrant populations
  - We do not believe it needs to be at churches only

- New networks for refugees/immigrants:
  - Despite decreases in social interactions between start and end of season, a majority of gardeners experienced the interactions at least sometimes/often at both times
References


Thank You

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