Effect of Nutrition Classes at Urban Peak on Dietary Patterns of Unhoused Youth

Minh Do
University of Colorado School of Medicine, Aurora, CO, USA

Introduction

- Youth homelessness is a major issue in the United States, with 4.3% prevalence in youth ages 13-17 and 9.7% prevalence in youth ages 18-24.
- Unhoused youth face significant nutritional challenges, ranging from food deprivation to obesity.
- Nutritional deficiencies correlate to higher incidences of mental health disorders and manifestations of symptoms.
- Studies have examined nutritional deficiencies and implications on health of unhoused youth, however the effect of nutritional education on dietary patterns of unhoused youth has not been fully evaluated.
- Objective: Implement nutrition classes at Urban Peak, a homeless shelter for youth ages 15-24, and evaluate impact of nutritional education on dietary patterns of this population.

Methods

- Partnership established between CU School of Medicine and Urban Peak as a “Service Learning” site.
- Project will rotate through eight lesson plans:
  1. Introduction to Nutrition
  2. Reading a Nutrition Label
  3. Food and Nutrients
  4. Protein
  5. Dairy and Vegetables
  6. Fruits and Vegetables
  7. Urban Peak as “Service Learning” site
  8. Partnership established between CU School of Medicine and Urban Peak as a “Service Learning” site to accommodate for curriculum change

Objective

- Study to examine nutritional deficiencies and implications on health of unhoused youth.
- Studies have examined nutritional deficiencies and manifestations of symptoms ranging from food deprivation to obesity.
- Unhoused youth face significant nutritional challenges, with 9.7% prevalence in youth ages 18-24 in the United States, with 4.3% prevalence in youth ages 13-17.

Results

Table 1. Summary table detailing number of student facilitators, participants, surveys completed and % of items unanswered from total number of questions associated with each lesson plan.

<table>
<thead>
<tr>
<th>Lesson</th>
<th># of student facilitators</th>
<th># of participants</th>
<th># of surveys completed</th>
<th># of survey questions unanswered</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>2</td>
<td>6</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>#2</td>
<td>4</td>
<td>12</td>
<td>15%</td>
<td>20%</td>
</tr>
<tr>
<td>#3</td>
<td>5</td>
<td>15</td>
<td>13.3%</td>
<td>15%</td>
</tr>
<tr>
<td>#4</td>
<td>6</td>
<td>18</td>
<td>12.5%</td>
<td>15%</td>
</tr>
</tbody>
</table>

Numerical Analysis:

Lesson #1 Introduction to Nutrition: 3 student facilitators, 4 participants, 3 surveys completed with 20% retention of key teaching points, with 20% of pre-survey questions unanswered.

Lesson #2 Reading a Nutrition Label: 3 student facilitators, 4 participants, 3 surveys completed with 50% retention of key teaching points, with 50% of pre-survey questions unanswered.

Lesson #3 Food and Nutrients: 3 student facilitators, 7 participants, 3 surveys completed with 50% retention of key teaching points, with 20% of pre-survey questions and 45% of post-survey questions unanswered.

Lesson #4 Protein: 2 student facilitators, 6 participants, 3 surveys completed with 20% retention of key teaching points, with 13.3% of pre-survey questions and 30% of post-survey questions unanswered.

One-month follow-up post-survey:

- When we returned to Urban Peak to administer the one-month follow-up post-survey, there was a complete turnover of the youths living at the center. With no means of contacting the youth who had participated in the previous lessons, we were unable to administer the post-survey.

Discussion

- After completing first four lesson plans, it is clear that the youth at Urban Peak have significant baseline knowledge of nutrition from responses in pre-surveys.
- Still uncertain of the effect that these classes have on long-term nutritional patterns of youth.
- Difficult to retain same participants for the one-month follow-up surveys.
- Ethical issue despite nutritional education.
- Accessibility to high quality nutrition serves as major barrier, significantly limiting choices in diet.
- One-month follow-up post-survey reveals knowledge of nutrition from responses in pre-surveys, indicating that these classes have an effect on long-term nutritional patterns of youth.
- Participants show significant improvement in knowledge on post-survey, demonstrating the effect of nutritional education on dietary patterns of youth.

Conclusion

- Partnership established between CU School of Medicine and Urban Peak as a “Service Learning” site to accommodate for curriculum change.
- Four lessons successfully implemented: Introduction to Nutrition, Reading a Nutrition Label, Fruits and Vegetables, and Dairy and Protein.
- Several barriers identified with data collection and analysis.
- One-month follow-up post-surveys to analyze long-term effects of lessons.
- Future Directions: Expansion from nutritional classes to general mentorship and teaching of other sensitive topics for youth, including drug use and sexual health.

References


Disclosure

- I have no financial ties or other relevant interests/conflicts to disclose.