Improving Hypertension Knowledge among Formerly Incarcerated Individuals: An Assessment of a Health Education Program during Community Reentry

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Background

- 2015 - 2016: Prevalence of hypertension (HTN) in the U.S. among adults 18 years and older was 29%
- HTN is a risk factor for cardiovascular disease, the leading cause of death among adults in the U.S.
- In young adulthood (18-30), development of HTN is more common in former inmates than in those without incarceration history (12% vs. 7%, OR=1.7)
- HTN knowledge is lower among those disproportionately impacted by incarceration (non-Hispanic black men and women, less education, lower income)
- There is a lack of HTN health education programs tailored for formerly incarcerated persons
- Community-based health education should include:
  - Community health workers
  - Interactive education
  - Familiar, community settings

Methods

Blood Pressure Understanding & Management Program (BUMP)

Population: Formerly incarcerated persons in the Health Matters class at the Institute for Community Justice (ICJ)
Setting: Institute for Community Justice
Evaluation: Pre-post knowledge assessments and anonymous participant ratings

Week 1: Introduction to Blood Pressure
- Key medical terms
- Understanding blood pressure readings

Week 2: Causes and Complications
- Causes, risk factors, and complications of HBP
- HBP and cardiovascular disease

Week 3: Choose Your Food Wisely
- Relationship between diet and blood pressure
- Understanding and using food labels

Week 4: Healthy Lifestyle Changes
- Lifestyle modifications to lower/control blood pressure
- Communicating with health professionals

Results

North
Mean Knowledge Assessment Scores Across Participants

<table>
<thead>
<tr>
<th>Week</th>
<th>N</th>
<th>Pre-Test</th>
<th>Post-Test</th>
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</thead>
<tbody>
<tr>
<td>Pre</td>
<td>9</td>
<td>69.1%</td>
<td></td>
</tr>
<tr>
<td>Post</td>
<td>9</td>
<td>83.3%</td>
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Results (cont.)

- There was a significant improvement (20.7%) in mean knowledge assessment scores (t=4.24, p=.003)
  - 8 of 9 students’ scores improved
  - 1 student remained the same
- Correct responses (%) improved on 11 of 14 assessment questions
  - 2 questions remained the same
  - 1 question declined
- Overall, the program was rated favorably by students

Discussion, Limitations & Recommendations

- Community-based educational programs may effectively improve HTN knowledge among formerly incarcerated persons.
- Limitations:
  - Small sample size (n = 9)
  - Tested at only one community reentry site
  - Curriculum could only be delivered to, and assessed among, English-speaking participants
- Recommendations for Future Research:
  - Conduct program with a larger sample
  - Include materials and support for non-English speakers
  - Examine how improvement in knowledge relates to changes in health behaviors and outcomes

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