Promoting Health Promotion Behaviors in the Low Income, Uninsured Population

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Disclosure

- The presenter attests that there was no financial support received for this presentation and there is no conflict of interest.
- I am disclosing that I have no contractual relationships with any organization as the publisher of my work.
- This presentation is based on the work that I did for my Capstone project for the DNP program at American Sentinel University.
Objectives

- Attendees will understand what health promotion behaviors are.
- Attendees will understand what health promotion behaviors the low income population use.
- Attendees will understand how to help the low income population adopt health promotion behaviors.
Background

- 21,000 individuals (18% of population) in Denton, TX live at or below poverty (County health rankings, 2013)

- Current health care trends focus on improving the health of the low income population

- Health of the low income population remains poor despite past health promotion interventions (U.S. Department of Health and Human Services, 2012).

- Need to better understand the health-promoting behaviors of low income, uninsured population

Reference:
Project Questions

What are the health-promoting behaviors, perceived health status, and perceived health competence of low income, uninsured individuals in Denton, Texas?
Theoretical Framework

Pender’s health promotion model (in brief)

- **Perception of health**
- **Self-efficacy**
- **Perception of benefits of taking action**

**Individual Experiences & biological characteristics**

**Interpersonal influences**

**Situation influences**

**Decision to engage in health-promoting behaviors**

**Engaging in health-promoting behaviors**

Significant relationship between physical health and the number of chronic illnesses ($r = .33, p < .05$) (Arnold et al., 2005)

CHF patients, significant relationship between physical functioning and perceived health competence ($r = .50, p < .001$)

Significant relationship between mental health and the number of chronic illnesses ($r = .27, p < .05$)

An inverse significant relationship between illness severity and self-efficacy ($r = -.36, p < .05$)

Another interesting finding was that individuals who were engaged in regular exercise had a better perception of their physical and mental health.

Reference:
Another study found that self efficacy was associated with engaging in health-promoting behaviors ($r = .61, p < .01$) and self-efficacy was a main predictor of health-promoting behaviors ($t (1) = 7.03, p < .001$) (Jackson, Tucker, & Herman, 2007).

Homeless women engaged more in health behaviors related to spiritual growth ($M = 2.86, SD = 0.63$) followed by those related to interpersonal relations ($M = 2.67, SD = 0.56$) and a negative correlation between perceived health status and the scores on the total HPLP II scale ($r = -.22, p < .01$) (Wilson, 2005).

References:
Method and Design

- Exploratory, descriptive project
- Structured face-to-face interview method
- Sample size of 44 adults with income at or below 200% of federal poverty level, uninsured, able to understand and speak English
- Recruitment sites: health clinic, soup kitchen
- Use 2 project assistants to do the interviews
- Four survey instruments collated into one questionnaire
## Instruments

<table>
<thead>
<tr>
<th>Demographic data instrument</th>
<th>Source</th>
<th>Number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed by investigator</td>
<td>11 items (varies)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Perceived health status instrument</th>
<th>Source</th>
<th>Number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four questions from the Behavioral Risk Factor Surveillance System (CDC, 2012)</td>
<td>4 items (one question on a 5-point Likert Scale, others are number of days)</td>
<td></td>
</tr>
</tbody>
</table>
## Instruments

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Source</th>
<th>Number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Health Competence</td>
<td>Smith, Wallston, &amp; Smith (1995)</td>
<td>8 items (5-point Likert Scale)</td>
</tr>
<tr>
<td>Health-promoting Lifestyle Profile II</td>
<td>Walker, Sechrist &amp; Pender (1995)</td>
<td>52 items divided into 6 subscales (4-point Likert scale)</td>
</tr>
</tbody>
</table>
Protection of Human Subjects

- Approved by the American Sentinel University IRB
- Approved by the board of the clinic
- Approved by the director at the soup kitchen
- Consents and information about project both read to potential informant and given in writing
- No identifiers on questionnaires
## Data Analysis, Findings & Interpretation: Demographics

<table>
<thead>
<tr>
<th></th>
<th>Sample (N = 41)</th>
<th>Denton statistics&lt;sup&gt;2&lt;/sup&gt;</th>
<th>Denton County Homeless&lt;sup&gt;1&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>males</td>
<td>51%</td>
<td>-</td>
<td>61.6%</td>
</tr>
<tr>
<td>Non-Hispanic</td>
<td>85.4%</td>
<td>76.9%</td>
<td>-</td>
</tr>
<tr>
<td>White</td>
<td>68.3%</td>
<td>73%</td>
<td>74%</td>
</tr>
<tr>
<td>Not working</td>
<td>70.7%</td>
<td>-</td>
<td>75.5%</td>
</tr>
<tr>
<td>homeless</td>
<td>41.5%</td>
<td>8.6%</td>
<td>-</td>
</tr>
<tr>
<td>At least high school diploma</td>
<td>77.5%</td>
<td>-</td>
<td>70.5%</td>
</tr>
<tr>
<td>age</td>
<td>45.22 years</td>
<td>33.9 years</td>
<td>43.4 years</td>
</tr>
</tbody>
</table>


## Data Analysis, Results & Interpretation: Perceived Health Status

Total Scale: $M = 3.100, SD = 1.105$

<table>
<thead>
<tr>
<th></th>
<th>Excellent</th>
<th>Very good</th>
<th>Good</th>
<th>Poor</th>
<th>Fair</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project</strong></td>
<td>10% $(n = 4)$</td>
<td>20% $(n = 8)$</td>
<td>25% $(n = 10)$</td>
<td>5% $(n = 2)$</td>
<td>40% $(n = 16)$</td>
</tr>
<tr>
<td><strong>Texas (2012)</strong></td>
<td>17.8%</td>
<td>28.4%</td>
<td>34.6%</td>
<td>5.5%</td>
<td>13.8%</td>
</tr>
<tr>
<td><strong>Ballard (2009)</strong></td>
<td>5.6%</td>
<td>21.4%</td>
<td>30.2%</td>
<td>25.4%</td>
<td>25.4%</td>
</tr>
</tbody>
</table>

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Data Analysis, Results & Interpretation: Perceived Health Status (continued)

<table>
<thead>
<tr>
<th></th>
<th>Number of poor physical health days</th>
<th>Number of poor mental health days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project</td>
<td>10.32</td>
<td>10.85</td>
</tr>
<tr>
<td>Denton¹</td>
<td>2.8</td>
<td>2.6</td>
</tr>
<tr>
<td>Calvert, Isaac, &amp; Johnson (2012)²</td>
<td>3.43</td>
<td>13.72</td>
</tr>
</tbody>
</table>

Data Analysis, Results & Interpretation

- **Perceived health competence**

Scale: strongly agree, agree, uncertain, disagree, strongly disagree

- Score for total scale: $M = 2.512$, $SD = 0.466$

- Findings consistent with Ballard’s study (2009)

- Interesting that despite reporting many poor health days, the informants felt moderately competent to control their health.
Data Analysis, Results & Interpretation

Health-promoting behaviors
Scale: Never, Sometimes, Often, Routinely

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total HPLP II scale</td>
<td>2.600</td>
<td>0.449</td>
</tr>
<tr>
<td>Interpersonal relations subscale</td>
<td>2.945</td>
<td>0.602</td>
</tr>
<tr>
<td>Spiritual growth subscale</td>
<td>2.899</td>
<td>0.625</td>
</tr>
<tr>
<td>Health responsibility subscale</td>
<td>2.482</td>
<td>0.598</td>
</tr>
<tr>
<td>Nutrition subscale</td>
<td>2.463</td>
<td>0.541</td>
</tr>
<tr>
<td>Stress management subscale</td>
<td>2.449</td>
<td>0.540</td>
</tr>
<tr>
<td>Physical activity subscale</td>
<td>2.309</td>
<td>0.816</td>
</tr>
</tbody>
</table>

No significant difference in the scores between the groups from each site.
# Reliability and Validity

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Project</th>
<th>Other studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questions on health status</td>
<td>.57</td>
<td>No reliability or validity data found</td>
</tr>
<tr>
<td>Perceived health competence scale</td>
<td>.45</td>
<td>.82 to .90</td>
</tr>
<tr>
<td>HPLP II total Scale</td>
<td>.93</td>
<td>.943</td>
</tr>
<tr>
<td>HPLP II subscales</td>
<td>.71 to .91</td>
<td>.793 to .872</td>
</tr>
</tbody>
</table>

Scope and Limitations

- Exploratory, descriptive = depth rather than scope

- Findings not generalizable due to small, convenience sample recruited from two local sources in Denton, Texas

- Social desirability bias

- Self-selections bias
Recommendations for Action

- Leaders
  - Improve access to health services, especially mental health services
  - Refocus health care delivery to foster the development of trusting relationships with the patients
  - Build trust through consistency of approach in health care delivery systems
Recommendations for Action

- Leaders
  - Improve access to better nutritional foods
  - Facilitate increased physical activity
  - Enhance engagement in stress management and health responsibility behaviors
Recommendations for Action

- Clinicians
  - Focus on health promotion behaviors in the assessment and planning
  - Focus on interventions that promote engagement in health promoting behaviors
Recommendations for Research

- Replication of study with a larger sample of informants recruited from different settings
- Increased research, both qualitative and quantitative, on the different components of health promotion model
Recommendations for Research

- Randomized controlled trial research on clinical strategies that help enhance use of health promotion behaviors to test effectiveness
Importance of building relationships with patients and families

Understanding what health behaviors patients use and which ones health care providers can foster.

Build on patient’s strengths and the strengths of their environment.
Thank you.

Questions and Answers