

# Promoting Health Promotion Behaviors in the Low Income, Uninsured Population

Maria Alice Masciarelli, RN, MSN, FACHE, CPHQ  
STTI Biennial  
November 2015

# 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:

County health rankings and roadmaps [report]. (2013). Retrieved from County Health Rankings:

<http://www.countyhealthrankings.org/app/#/texas/2013/rankings/outcomes/overall/by-rank>

U.S. Department of Health and Human Services. (2012). *2012 annual progress report to congress: National strategy for quality improvement in health care* [Annual report]. Retrieved from

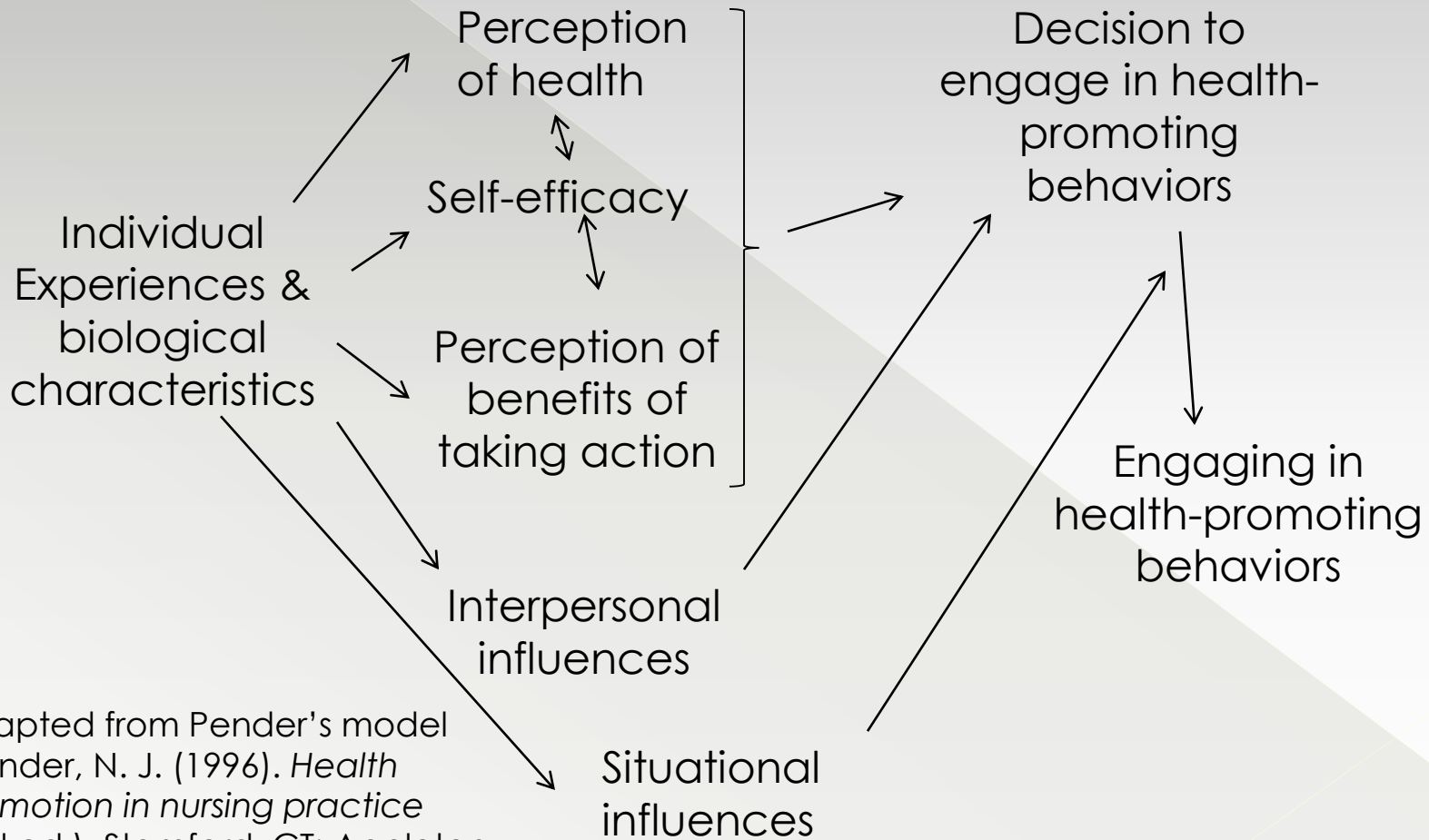
<http://www.ahrq.gov/workingforquality/nqs/nqs2012annlrpt.pdf>

# 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)



Adapted from Pender's model  
(Pender, N. J. (1996). *Health promotion in nursing practice* (3rd ed.). Stamford, CT: Appleton & Lange, p. 67)

# Literature Review: Perceived Health Status, Self-Efficacy, 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:

Arnold, R., Ranchor, A. V., DeJongste, M. J., Koeter, G. H., Ten Hacken, N. H., Aalbers, R., & Sanderman, R. (2005). The relationship between self-efficacy and self-reported physical functioning in chronic obstructive pulmonary disease and congestive heart failure. *Behavioral Health, 31*, 107-115. Retrieved from <http://www.ebscohost.com>

# Literature Review: Perceived Health Status, Self-Efficacy, Health-Promoting Behaviors (continued)

- 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;

Jackson, E. S., Tucker, C. M., & Herman, K. C. (2007). Health value, perceived social support, and self-efficacy as factors in health-promoting lifestyle. *Journal of American College Health, 56*(1), 69-74. Retrieved from <http://www.ebscohost.com>

Wilson, M. (2005). Health-promoting behaviors of sheltered homeless women. *Family & Community Health, 28*(1), 51-63. Retrieved from <http://www.ebscohost.com>



# Method and Design

- Explorative, 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

	Source	Number of items
Demographic data instrument	Developed by investigator	11 items (varies)
Perceived health status instrument	Four questions from the Behavioral Risk Factor Surveillance System (CDC, 2012)	4 items (one question on a 5-point Likert Scale, others are number of days)

# Instruments

	Source	Number of items
Perceived Health Competence	Smith, Wallston, & Smith (1995)	8 items (5-point Likert Scale)
Health-promoting Lifestyle Profile II	Walker, Sechrist & Pender (1995)	52 items divided into 6 subscales (4-point Likert scale)

# 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

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

<sup>1</sup>Denton County Homeless Coalition. (2013). 2013 point in time homeless count. Retrieved from <http://endhomelessnessdenton.com/infodata/point-in-time-count/2013-pit-count/>

<sup>2</sup>Denton County quickfacts from U. S. Census Bureau. (2012). Retrieved from <http://quickfacts.census.gov/qfd/states/48/48121.html>

# Data Analysis, Results & Interpretation: Perceived Health Status

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

	Excellent	Very good	Good	Poor	Fair
Project	10% ( $n = 4$ )	20% ( $n = 8$ )	25% ( $n = 10$ )	5% ( $n = 2$ )	40% ( $n = 16$ )
Texas (2012) <sup>1</sup>	17.8%	28.4%	34.6%	5.5%	13.8%
Ballard (2009) <sup>2</sup>	5.6%	21.4%	30.2%	25.4%	25.4%

<sup>1</sup>Center for Disease Control and Prevention. (2012, December 28). *BRFSS 2013: Behavioral risk factors surveillance system questionnaire (2013 BRFSS Questionnaire/Final/12.28.2012)*. Washington, DC: Government Printing Office.

<sup>2</sup>Ballard, F. A. (2009). *Homeless sheltered women's health promotion behaviors* (Doctoral dissertation). Retrieved from <http://libres.uncg.edu/ir/uncg/list-etd.aspx?styp=ty&bs=Doctoral%20Dissertation>

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

	Number of poor physical health days	Number of poor mental health days
Project	10.32	10.85
Denton <sup>1</sup>	2.8	2.6
Calvert, Isaac, & Johnson (2012) <sup>2</sup>	3.43	13.72

<sup>1</sup>Center for Disease Control and Prevention. (2012, December 28). *BRFSS 2013: Behavioral risk factors surveillance system questionnaire (2013 BRFSS Questionnaire/Final/12.28.2012)*. Washington, DC: Government Printing Office.

<sup>2</sup>Calvert, W. J., Isaac, P., & Johnson, S. (2012). Health-related quality of life and health-promoting behaviors in Black men. *Health & Social Work*, , 19-17. <http://dx.doi.org/10.1093/hsw/hls001>

# 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

	Mean	SD
Total HPLP II scale	2.600	0.449
Interpersonal relations subscale	2.945	0.602
Spiritual growth subscale	2.899	0.625
Health responsibility subscale	2.482	0.598
Nutrition subscale	2.463	0.541
Stress management subscale	2.449	0.540
Physical activity subscale	2.309	0.816

No significant difference in the scores between the groups from each site.

# Reliability and Validity

Instrument	Project	Other studies
Questions on health status	.57	No reliability or validity data found
Perceived health competence scale	.45	.82 to .90 <sup>1</sup>
HPLP II total Scale	.93	.943 <sup>2</sup>
HPLP II subscales	.71 to .91	.793 to .872 <sup>2</sup>

<sup>1</sup>Smith, M. S., Wallston, K., & Smith, C. A. (1995). The development and validation of the Perceived Health Competence Scale. *Health Education Research, 10*(1), 51-64. Retrieved from <http://her.oxfordjournals.org>

<sup>2</sup>Walker, S. N., & Hill-Polerecky, D. M. (1996). *Psychometric evaluation of the Health-Promoting Lifestyle Profile II*. Unpublished manuscript, University of Nebraska Medical Center, Nebraska. Retrieved from [http://www.unmc.edu/nursing/docs/HPLPII\\_Abstract\\_Dimensions.pdf](http://www.unmc.edu/nursing/docs/HPLPII_Abstract_Dimensions.pdf)

# Scope and Limitations

- Explorative, 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-selection 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



# Summary

- ⦿ 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