# **Translation and Testing of a Scale to Assess Hypertension Self-Care Activities among Latinos**

Warren-Findlow, J.<sup>1</sup>, Karp, C.<sup>2</sup>, Coffman, M.<sup>1</sup>, & Vinoski, E.<sup>1</sup>

<sup>1</sup>University of North Carolina at Charlotte; <sup>2</sup>Johns Hopkins University

American Public Health Association, November 2015



## **Background**

Latinos in the US are less likely to have their blood pressure controlled as compared to Blacks or Whites. We previously developed the Hypertension Self-Care Activity Level Effects (H-SCALE) to measure adherence to behaviors recommended for managing hypertension: taking medication, healthy eating, being physically active, managing weight, and reducing tobacco and alcohol intake.

## **Purpose**

The purpose of this study is to describe the translation process and pilot testing of the Spanish version of the H-SCALE. We report on the prevalence of self-care behaviors among Latinos with and without hypertension living in Charlotte, North Carolina.

## Methodology

We implemented a modified version of the World Health Organization process for translation and adaptation of instruments, which uses forward and backward translation in conjunction with an expert panel review. The resulting survey was then piloted in a primary care clinic serving Latinos.

# **Study Sample**

Among participants (n=124):

- 77.4% were female
- 78.2% were age 50 or younger
- 47.5% obtained less than a HS degree
- 48.4% were classified as obese
- 31.5% had hypertension



#### **Results**

The internal consistency of the 6 subscales was within limits ( $\alpha \ge .70$ ) and item analyses indicated no floor or ceiling effects.

H-SCALE Subscale	Cronbach's Alpha	Available Range	Observed Range	Mean Score (sd)
Medication*	.87	0-21	0-21	12.44 (8.83)
Healthy Eating	NA	0-7	0-7	3.26 (2.46)
Physical Activity	.80	0-14	0-14	6.30 (4.66)
Tobacco Exposure	.84	0-14	0-14	1.11 (3.13)
Weight Management	.87	10-50	10-50	35.06 (9.48)
Alcohol Intake†	.75	$0\text{-}\infty$	0-48	1.05 (4.73)

<sup>\*</sup>n=39 have hypertension †85.5% were alcohol abstinent

Self-Care Activity	Total Sample %	Without Hypertension % (n=85)	With Hypertension % (n=39)
Medication Adherence	NA	NA	33.3
Healthy Eating++	45.5	47.6	41.0
Physical Activity**	41.7	43.9	36.8
Non-Smoking**	79.5	78.3	82.1
Weight Management**	37.2	37.6	33.3
Alcohol Abstinence	85.5	85.9	84.6

<sup>††</sup>Missing response from 1 participant without hypertension

#### **Conclusions and Future Directions**

The Spanish version of the H-SCALE demonstrates basic psychometric properties. Spanish speaking individuals with hypertension report low rates of adherence to taking medication, managing weight, healthy eating, and being physically active. Future studies will validate the Spanish version of the H-SCALE against clinical blood pressure.



<sup>\*\*</sup>Missing responses from 3 participants without hypertension