CARDIOVASCULAR RISK AND PREHYPERTENSIVE AND HYPERTENSIVE HISPANICS: A COMPARISON WITH NON-HISPANIC WHITES

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BACKGROUND
Hispanics, the largest and fastest growing US minority, now account for 15% of the population. However, the cardiovascular (CV) risk of the non-Mexican Hispanic population has not been well studied. Little is currently known regarding prehypertension in this population.

METHODS
Between 1997-2006, the Florida Heart Research Institute performed free, voluntary CV risk screening for 3,360 Hispanics, (2,139 women, 1,221 men), of whom less than 2% were Mexican and 1,694 non-Hispanic whites (NHW; 957 women, 737 men). Multivariate analyses were performed to correlate prehypertension and hypertension with measurements of blood pressure (BP), Body Mass Index (BMI), fasting blood glucose and lipid profile, and smoking and exercise history. High specificity C-Reactive Protein (CRP) was measured in a subgroup of 4,872.

RESULTS
Among Hispanics, 678 (20.2%) were hypertensive, 1125 (33.5%) prehypertensive, and 1,557 (46.3%) normotensive. Among NHW, 374 (22.1%) were hypertensive, 662 (39.1%) prehypertensive, and 658 (38.8%) normotensive. Age, obesity, and triglyceride levels were all significant independent risk factors for both prehypertension and hypertension in both populations, (p≤ 0.005). Elevated total cholesterol was associated with both prehypertension (p=.013) and hypertension (p=.001) among Hispanics, but not amongst NHW. Diabetes was strongly predictive of hypertension among Hispanics (p=.018) but not amongst NHW. In bivariate analysis, C-reactive protein was significantly related to both diastolic (p=.028) and systolic (p=.002) BP amongst Hispanics. However, amongst NHW, CRP was not associated with systolic (p=0.313) and was comparatively borderline associated with diastolic BP (p=0.045).

CONCLUSIONS
Both prehypertension and hypertension are prevalent in this Miami population and they are both associated with significant cardiovascular risk. However, the specific risk profile of this non-Mexican Hispanic population is distinct from that of the NHW population. Further study is needed to better elucidate the causes of these differences, as well as to better inform medical efforts to control this devastating disease in a multiethnic setting.