**INTRODUCTION**

- Hispanics are the largest and fastest growing minority in the US, increasing from 12.5% of the US population in 2000 to 15% in 2009.1
- It has been found that Mexican Americans (whose cardiovascular risk factors have been thoroughly studied) show a higher prevalence cardiovascular risk, particularly obesity and diabetes than NHW2
- However, Hispanics represent an ethnic group with diverse ancestries that may vary genetically, culturally and socially. Yet little is known about the differences and variation in cardiovascular risk factor profile among Non-Mexican Hispanic subgroups.
- Florida Heart Research Institute has been offering free cardiovascular screenings to the community since 1998; more than 75% of those screened were Hispanics mainly of South American, Central American and Caribbean background; less than 1% were Mexican.

**METHODS**

- Analysis was performed of retrospective data of 4696 Non-Mexican Hispanics age 18 and older who received free public cardiovascular screenings at Florida Heart Research Institute. These individuals were categorized into 3 subgroups: South American (SA), Central American (CA), and Caribbean (CB) background.
- Screenings were publicized through radio public service announcements, radio interviews, brochures and flyers distributed at public health fairs and, increasingly, by word of mouth.
- No incentives were provided to participants other than a report of their cardiovascular risk factor profile and educational brochures.
- Counseling on healthy lifestyle habits and educational brochures on cardiovascular risk factors were provided. Participants with abnormal results were advised to seek medical attention. A list of federally funded clinics was made available to those with no health insurance.
- Demographic and behavioral data were gathered using a structured questionnaire. Cardiovascular risk data gathered included BMI, blood pressure, fasting lipid profile, glucose and HDL-C.
- Differences among and between Hispanic subgroups were assessed using Chi-square analysis. The Bonferroni Correction was used to adjust for multiple comparisons; p < .002, across subgroup.

**DEFINITION OF RISK FACTORS**

- **Blood Pressure**: Normal: SBP < 120mmHg or DBP < 80mmHg
- Pre-Hypertension: SBP 120-139 mmHg or DBP 80-89 mmHg
- Hypertension: SBP ≥140 mmHg or DBP ≥90 mmHg and use of antihypertensive medications
- **Dyslipidemia**: Total Cholesterol ≥200mg/dL
- LDL ≥130mg/dL
- HDL ≥40mg/dL
- Triglycerides ≥150mg/dL and/or use of lipid lowering medications
- **Glucose**: Pre-diabetes glucose levels 100mg/dL – 125mg/dL
- Diabetes mellitus glucose levels ≥126mg/dL and/or use of diabetes medications
- **Body Mass Index (BMI)**:
  - Normal: 19.5-24.9
  - Overweight: 25.0-29.9
  - Obese: ≥30

**RESULTS**

- The majority of the participants in each group were women.
- South Americans had the highest percentage of BMI ≥25 while Central Americans had the highest with BMI ≥30.
- Central Americans showed high prevalence of BMI ≥30, HDL > 40, Triglycerides ≥ 150 and Glucose ≥126.
- Caribbean had the highest percentage of age ≥65yrs and had insurance.
- Caribbean showed high prevalence of pre-diabetes and hypertension.
- No significant differences were seen in Total Cholesterol and LDL levels across subgroup.

**CHARACTERISTICS OF THE SAMPLE**

- HISPANIC DISTRIBUTION IN MIAMI-DADE COUNTY
- HISPANIC DISTRIBUTION IN STUDY SAMPLE
- South American (3066) includes: Argentina, Bolivia, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay and Venezuela
- Central American (712) includes: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama
- Caribbean (918) includes: Cuba, Puerto Rico and Dominican Republic

**PREVALENCE OF COMPONENTS OF METABOLIC SYNDROME ACCORDING TO SUBGROUPS**

Central Americans appear to have more of a metabolic phenotype = high BMI, TG, Glucose levels and low HDL, Caribbeans show a prevalence of high glucose levels and high blood pressure.

**CONCLUSIONS**

Our study shows significant differences in cardiovascular risk factors between these Hispanic subgroups. Compared to the other subgroups, Central Americans appear to have higher risk of a metabolic phenotype: higher BMI, higher triglyceride and lower HDL.

These data provide useful information that highlights the need for further research to account for these differences. This may be important for targeting screening and the developing of unique effective preventive interventions based on country of origin.