INTRODUCTION

The Black population is the nation’s second largest minority (13%). It represents an ethnic group with diverse ancestry that may vary genetically, culturally and socially, yet little is known about the differences in the prevalence of cardiovascular risk factors among these Black subgroups.

Epidemiological studies have shown that Blacks compared to Whites among these subgroups:

- Are at greater risk for cardiovascular disease and stroke
- Have the highest prevalence of hypertension in the world
- Are 2 times more likely to be diagnosed with diabetes
- Have a higher annual rate of heart attacks
- Are more likely to have heart failure, get worse faster and suffer more severely.

STUDY OBJECTIVES

To examine the cardiovascular risk profiles within a diverse sample of Miami Black subpopulations responsive to public health outreach.

DEFINITION OF RISK FACTORS

- Hypertension: Normal: SBP < 120 and DBP < 80
  Prehypertension: SBP 120-139 or DBP 80-89
  Hypertension: SBP ≥140 or DBP 90 and/or self report use of antihypertensive medications

- Dyslipidemia: (non-fasting) Total cholesterol (TC): >200mg/dl
  HDL: <40mg/dl and/or self report use of lipid lowering medications

- Diabetes mellitus: (non-fasting) Diabetes: glucose levels ≥ 200 mg/dl and/or self report use of diabetic medications

- Body Mass Index (BMI): Normal:19-24
  Overweight: 25-29
  Obese: ≥30

METHODS

- Retrospective data of 5,000 Black participants of Florida Heart Research Institute’s community cardiovascular health screening. Participants were categorized into subgroups: Haitian (H), African American (AA), Hispanic (HB) and Caribbean (C).

- Data obtained included: Body Mass Index (BMI), blood pressure and non-fasting blood samples for Total Cholesterol (TC), HDL, and glucose. Blood samples were collected by fingerstick.

- Framingham risk score was calculated for each subgroup.

- 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.

- Standard epidemiological techniques were employed to estimate prevalence. The Bonferroni correction was used to adjust for multiple comparisons, p<.002

RESULTS

- Differences amongst subgroups were noted in multiple parameters of cardiovascular risk: age (p<0.001), health insurance status (p<0.001), family history (p<0.001), smoking (p<0.001), body mass index (p<0.001), HDL (p<0.001), and blood pressure (p<0.001).

CONCLUSIONS

- Our study shows marked differences in cardiovascular risk factors amongst these Black subgroups.

- These findings may have important public health implications, and include a heretofore understudied Haitian population.

- Further studies are needed to elucidate the causes of these differences, and to improve efforts to address cardiovascular disease in a multiethnic setting.