Introduction

• Cardiovascular disease remains the leading cause of death among ethnic minority groups in the United States.
• CVD remains the leading cause of death in ethnic minority groups in the US.
• Ethnic minority groups have the highest incidence of hypertension, diabetes, metabolic syndrome, and consequently adverse cardiovascular events.
• Similarly a poorer functional capacity, has been found in Hispanic
• There are no prior head to head comparisons between other ethnic (ie Asians) groups for appropriate distinction of targeting therapies.

Background

• Ethnic minority groups such as non-Hispanic blacks (NHB), Hispanic Americans (H) and South East Asians (SEA) have a high prevalence of metabolic syndrome (MS).
• The differences of cardiometabolic risk profiles and functional capacity among these groups have not been fully characterized.

Project Goal

• Our study sought to assess these differences in a racial/ethnically diverse population in North East Florida.

Method

• Adults aged 18 and older attended free health screenings at local community centers conducted by the UF-Jacksonville Women’s Heart Program. Self-reported race and medical history were obtained.
• Using validated cardiometabolic risk screening tools, blood pressure, waist circumference, lipid profiles, blood sugar levels and functional capacity were obtained.
• Multivariable logistic regression was used to determine whether MS (presence of 3 or more MS components) is associated with race, controlling for other factors. Functional capacity (DASI) was also evaluated.

Results

• Of the 345 participants, 38% were H, 38% NHB, 9% W, and 15% SEA. MS was present in 47% H, 35% NHB, 21% W and 33% SEA.
• Highest rates by MS components were: 46% of H met the BP criteria; 70% and 47% of NHB met the WC and the fasting glucose criteria, respectively; 56% of SEA and 52% of H met the HDL criteria while 59% of H met the TG criteria (Figure 1).
• Controlling for age, sex, BMI, family history of heart disease, alcohol use and treatment for HTN and/or HLD, H were 7.3 times more likely to have MS compared to W (OR=7.3, 95%CI 1.8, 28.6); 3.3 times more likely compared to NHB (OR=3.3, 95% CI 1.67, 6.4) but similar to SEA (OR = 1.4, 95% CI 0.6, 3.1).
• SEA were 5.2 times more likely to have MS compared to W (OR =5.2, 95%CI 1.2, 22.2). Functional capacity was significantly lower in H and NHB compared to W.
• Among those with MS, H and SEA had significantly lower functional capacity (Table 1).

Conclusion

• Hispanics have the highest likelihood of MS compared to other groups in our study.
• Among MS patients, H and SEA have significantly lower functional capacity.
• Differences in the distribution of components of MS according to racial/ethnic groups may guide specific therapeutic approaches and help reduce cardiovascular disparities in these groups.