



OBJECTIVES

- To assess knowledge, attitudes, and beliefs (KAB) among South Asian Americans (SAA) related to cardiovascular disease (CVD)
- To examine associations between KAB and prevalence of CVD among SAA across age groups



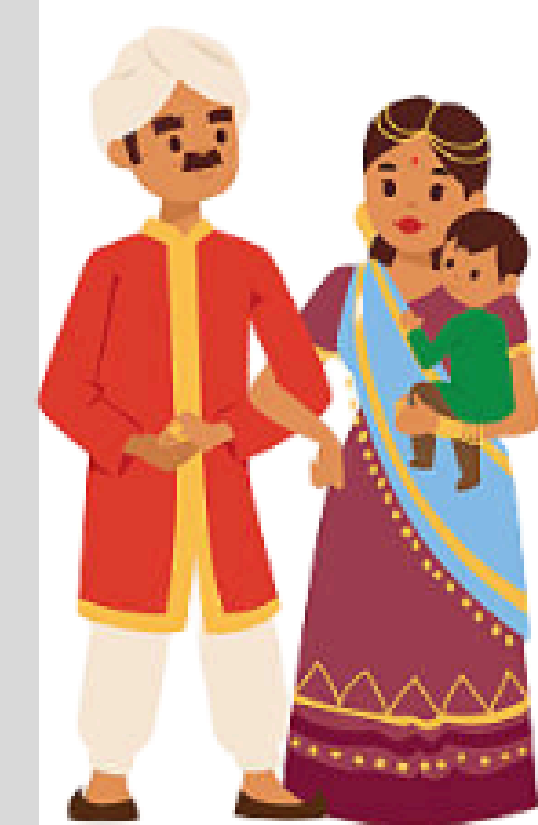
BACKGROUND

- South Asian includes populations originating from Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka. 5.4 million SAA reside in the US
- Current research indicates that SAA are genetically predisposed to CVD with a 2-3x higher chance of being affected by coronary heart disease when compared to the general population¹
- Despite the increased risk of CVD among the SAA population, there is a lack of research on social factors and targeted interventions

METHODS

Used an anonymous Qualtrics survey to gather KAB data on SAA, investigating dietary and CVD health choices; our recruitment was via email consults

- Conducted a cross-sectional study to investigate KAB related to CVD among SAA individuals
- Survey questions discussed: *age, CVD knowledge, and beliefs on cultural factors related to CVD health*
- Answers indicating negative CVD health beliefs were awarded a point; a higher point sum was a greater indication of gaps in CVD knowledge
- Data analyses using RStudio based on a composite score out of 22 KAB questions
 - Ran an ANOVA to determine if our data was statistically significant
- The composite score quantified the magnitude of exposure/outcome and was stratified by age amongst participants, yielding 3 groups
 - Ran posthoc TukeyHSD to analyze which age groups significantly differed in composite score



RESULTS

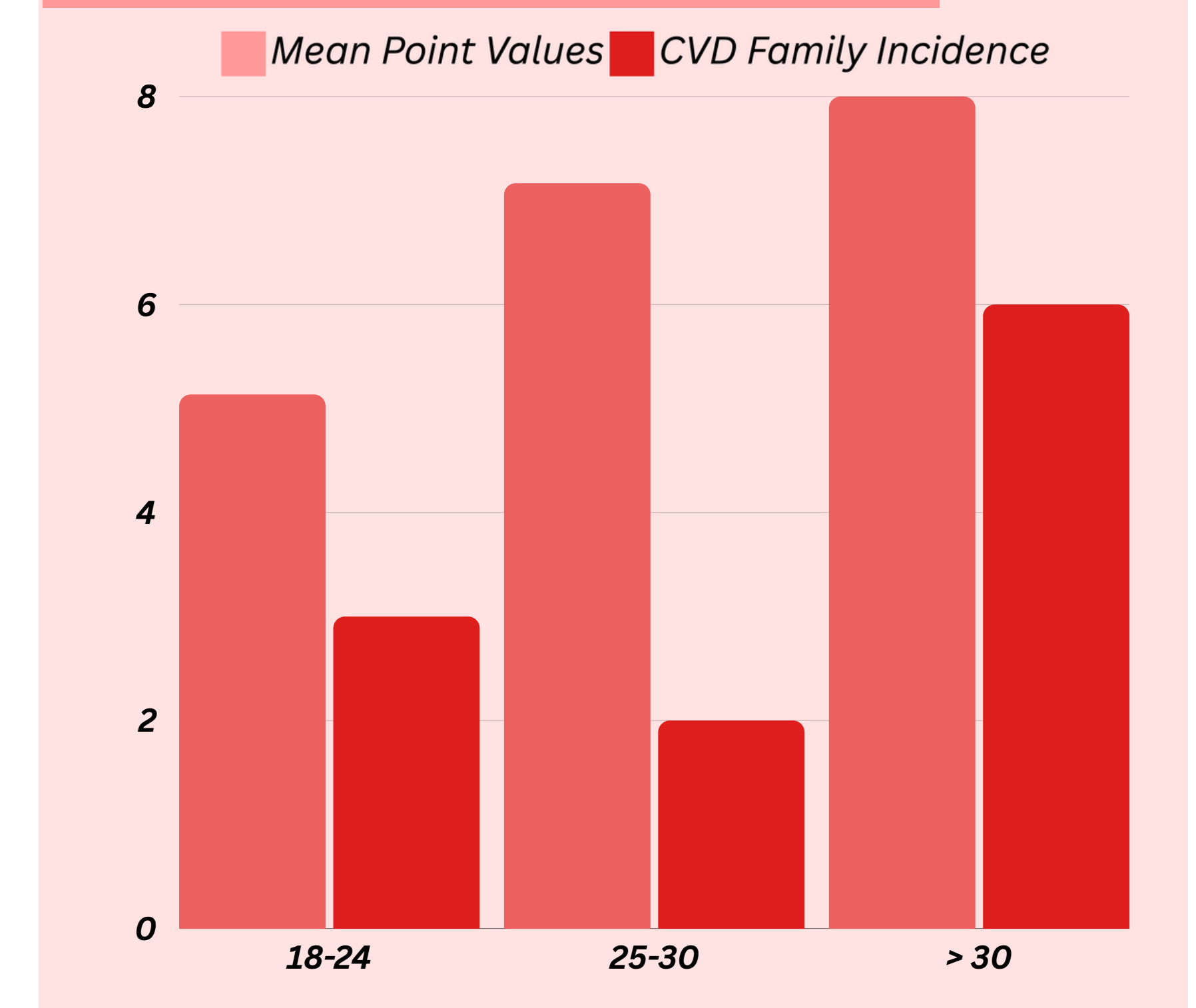
- Null hypothesis: No significant difference in mean point values between our 3 age groups
 - Results (p-value = 0.00236) suggest a significant difference between CVD knowledge and age
 - We ran a post-hoc TukeyHSD and found the most significant difference between our young and old groups
 - Over 66% of survey respondents over the age of 30 reported having immediate family members at risk for or diagnosed with CVD.
 - ANOVA test returned a p-value of 0.00236, indicating a significant difference in mean point values between age groups
 - Post-Hoc TukeyHSD Test revealed a significant difference between the mean point values of the >30 and 18-24 age groups with a p-value of 0.00548
- Of our 55 respondents:
- 63.6%** are between the ages of 18-24
 - 14.5%** are between the ages of 25-30
 - 16.4%** are over the age of 30



Table 1: KAB about CVD	Survey Respondents
Have <u>not</u> previously discussed how to maintain CVD health with family members	42.3% (n=23)
Have <u>not</u> discussed CVD risk factors with their doctor	67.3% (n=37)
Believe that there are <u>adverse</u> effects of a high protein diet	51.9% (n=29)
Do <u>not</u> consider cardiovascular health when making dietary choices	48.9% (n=27)

- A substantial proportion of respondents have not discussed how to maintain their cardiovascular health with either their families (42.3%) or their doctor (67.3%)
- Many (51.9%) falsely believe that a protein-rich diet is detrimental to health

Figure 1: Mean Point Values, Stratified by Age



- CVD family incidence proportions were also strongly correlated with mean point values, except for our middle-age group. (p-value = 0.00236)
 - Age was a confounding factor for CVD risk factors/incidence

DISCUSSION

- 34.6% (n=19) of survey respondents have immediate family members who have been diagnosed with or are at risk for CVD. This is compared the 5.5% of US adults that have CVD²
 - Health misconceptions and gaps in knowledge are reflected by disproportionately high rates of CVD among family members of respondents when compared to the rates of CVD among all Americans
- Our survey findings indicate that cardiovascular health knowledge isn't emphasized among SAA families as 42.3% do not discuss CVD health
 - Respondents are uninformed surrounding dietary habits
- Establishing heart health education programs tailored to the SAA community's cultural nuances would help in improving CVD health outcomes for South Asians.
- Limitations in our study can be our sample size (N=55) as well as sample bias; UCSD SAA might not be representative of national population/beliefs

REFERENCES

1. Vafaei, P., Liu, CM., Davis, H. et al. Heart health for South Asians: improved cardiovascular risk factors with a culturally tailored health education program. BMC Public Health 23, 711 (2023). <https://doi.org/10.1186/s12889-023-15667-y>
 2. Centers for Disease Control and Prevention. (2023, February). Heart Disease Prevalence. Retrieved from <https://www.cdc.gov/nchs/has/topics/heart-disease-prevalence.htm>