

Disparities in Self-Reported Diabetes Mellitus among Arab, Chaldean, and Black Americans in Southeast Michigan

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Objectives

- To estimate the prevalence of self-reported diabetes among Whites, Arabs, Chaldeans, and Blacks in southeast Michigan.
- To estimate the association between ethnicity and diabetes before and after adjusting for demographic, socioeconomic status, health care, chronic conditions, and health behavior variables.

Background

- The prevalence of diabetes is higher for Blacks (13.3%) compared to Whites (8.5%)
- Whites are usually used as the reference category for health comparisons.
- Whites are a heterogeneous group, and include individuals from the Middle East.
- Little attention has been paid to the health status of individuals from the Middle East, such as Arabs/Chaldeans.

Methods

The study used data from the 2005 Health Assessment Survey, which assessed the prevalence of and risk factors for chronic conditions among individuals attending the Arab American & Chaldean Council (ACC), N=3,543

- Dependent variable: Self-reported diabetes
- Independent variable: Race/Ethnicity
- Other variables considered as risk factors or potential confounders were included in these analyses (age, sex, marital status, language spoken/written, education, employment, income, health insurance, physician visit, self-rated health, hypertension, high cholesterol, heart disease, depression, BMI, smoking, physical activity, transportation, fruit and vegetable servings).
- Logistic regression was used to estimate the strength of the association between diabetes and race/ethnicity
- Data management procedures were carried out with SAS

Results

Figure 1: Age- and Sex-Adjusted Prevalence of Diabetes by Race/Ethnicity

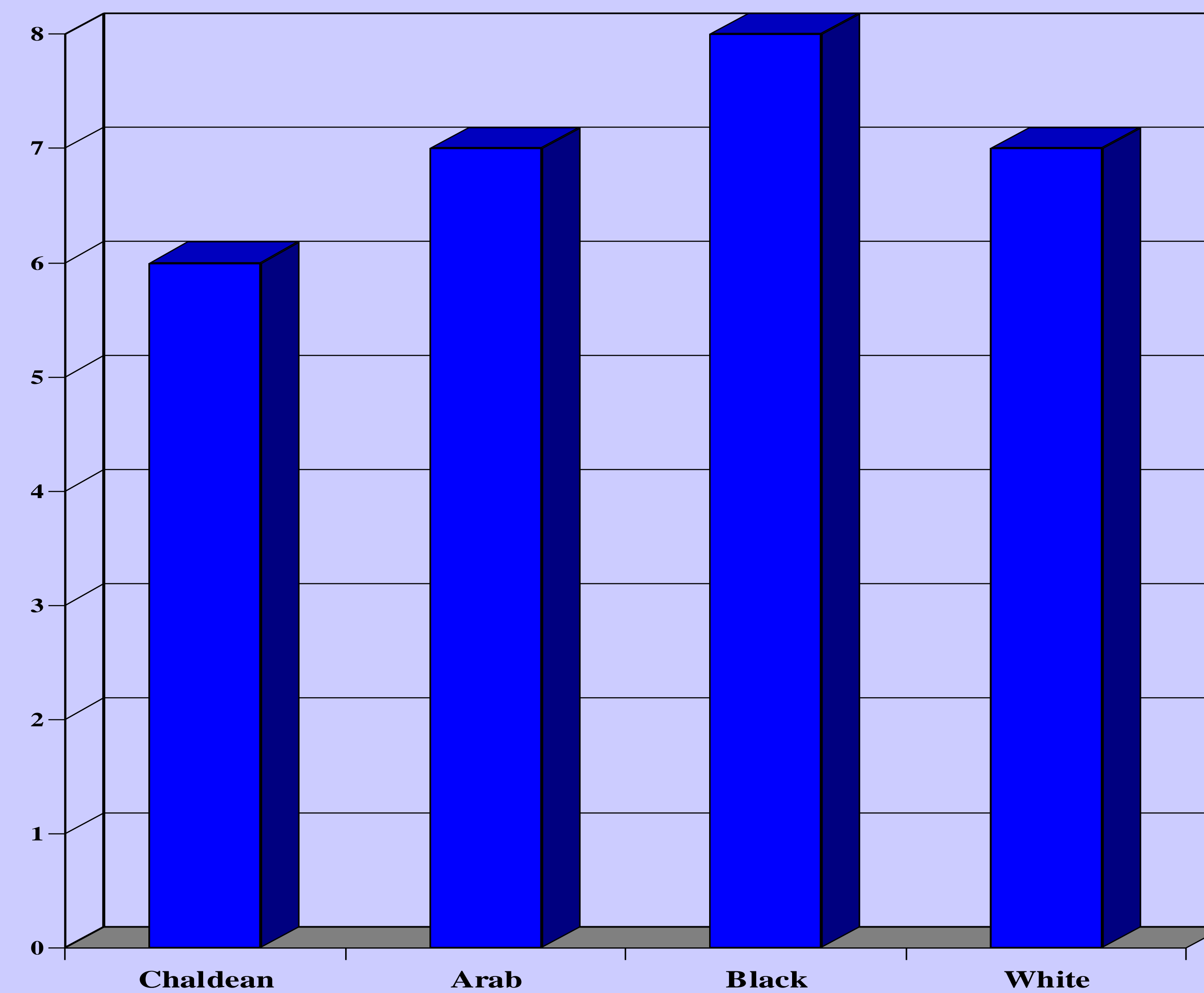
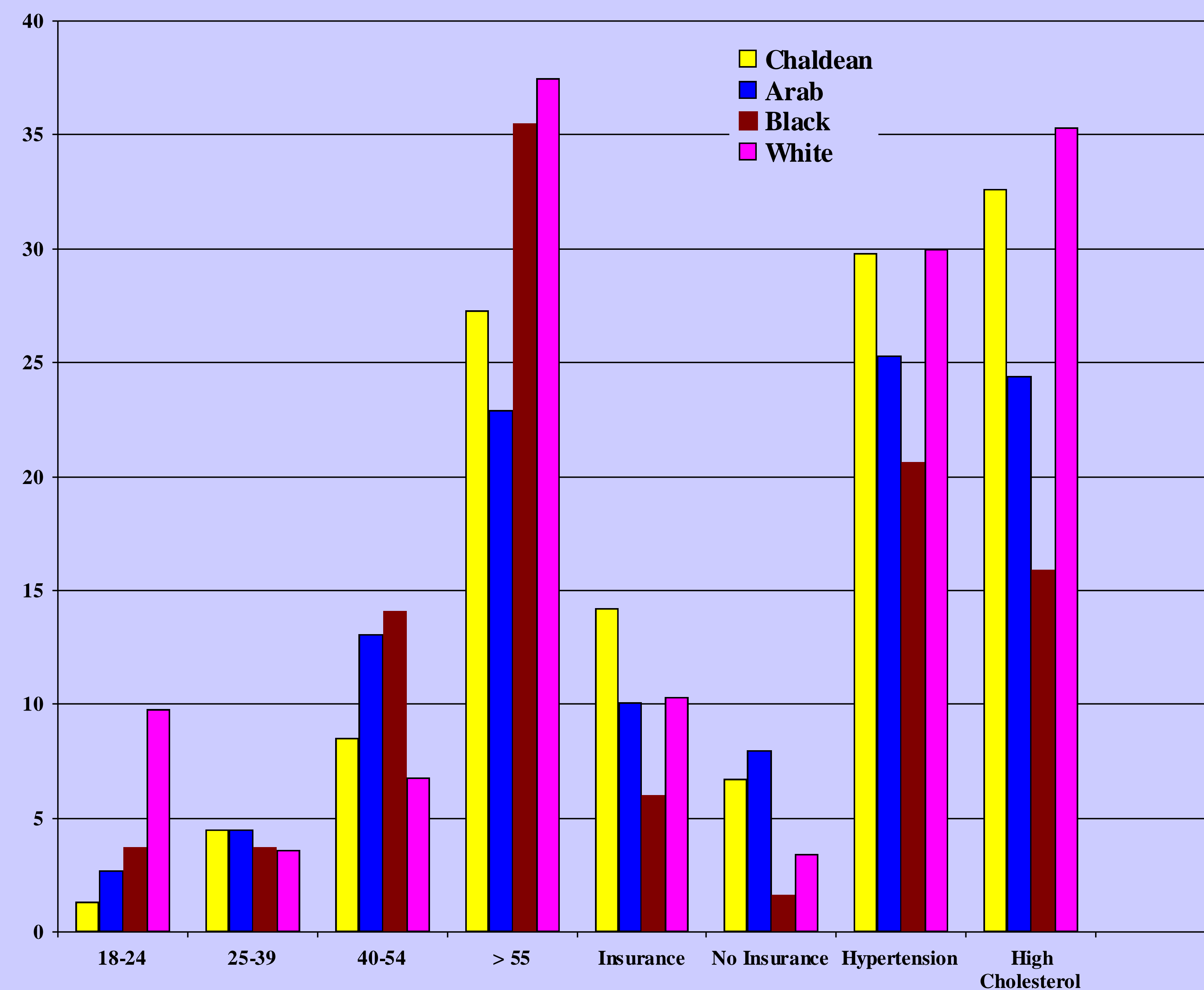


Figure 2: Prevalence of Diabetes by Race/Ethnicity for Selected Covariates



Results...

- In the unadjusted model, Chaldeans and Arabs were more likely, while Blacks were less likely to have self-reported diabetes compared to whites, but this finding was not statistically significant
- When adjusting for health care access, Chaldeans were two times less likely to report having diabetes than Whites.
 - However, this association was explained in the fully adjusted model.

Limitations

- Convenience sample -- perhaps only health (or unhealthy) individuals or those who were available during the study times and days may have volunteered.
- Self-reported diabetes -- approximately one-third of individuals with diabetes are undiagnosed.
 - This limitation would have underestimated our study's results.

Conclusions

- Prevalence of diabetes is lower for Chaldeans compared to Arabs, Whites, and Blacks.
- Future studies should include a probability sample
- These studies also should incorporate better measurements of SES, health behaviors, health care, and questions regarding acculturation and language use.

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