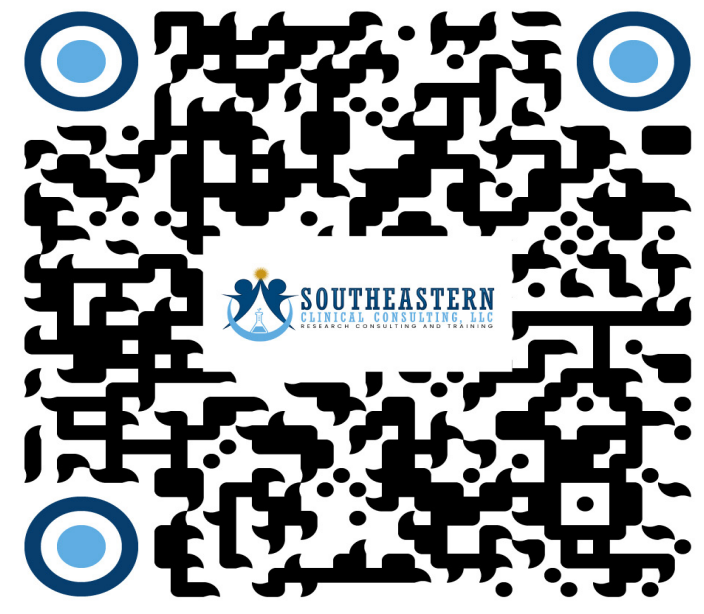


Healthcare Access and Health Equity Outcomes Among Adults with Cardiometabolic Conditions

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Introduction

Cardiometabolic conditions such as hypertension, high cholesterol, coronary heart disease, and diabetes collectively are the leading cause of cardiovascular morbidity and mortality in the United States. There is a gap in the literature looking at cardiometabolic conditions "collectively" and health equity outcomes research.

Objective:

Utilize the National Health Interview Survey (NHIS) 2020, to analyze the influence of healthcare access, health behaviors, and socioeconomic factors on health equity outcome (self-reported health status) in 15,595 adult cardiometabolic survey participants.

Research Questions

R1- Are healthcare access (HA) a predictor of health equity outcomes in adults with cardiometabolic conditions (CMCs) while controlling for sociodemographic factors (SDF)?

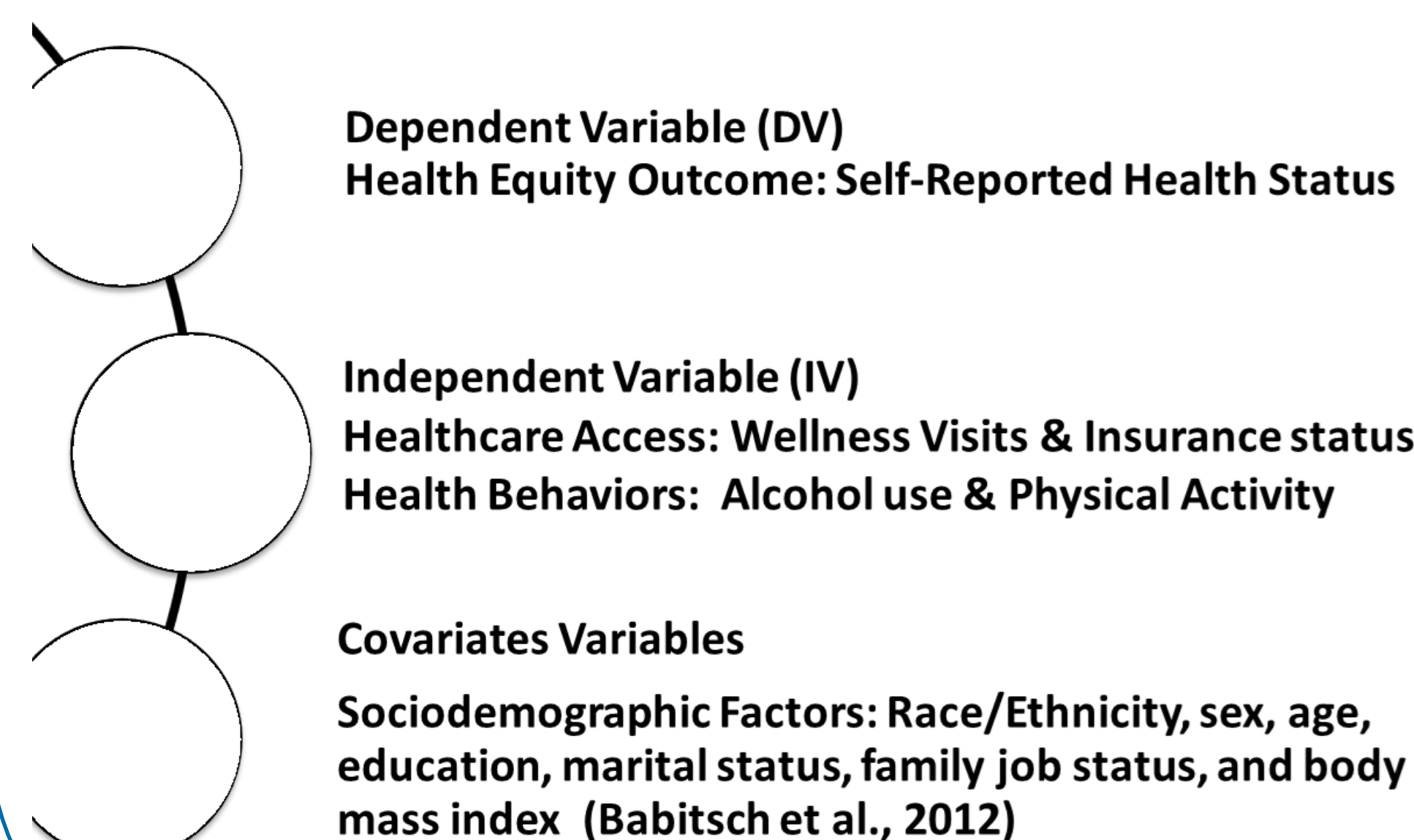
R2- Are health behaviors (HB) a predictor of health equity outcomes in adults with CMCs while controlling for SDFs?

R3- Are SDFs a predictor of health equity outcomes in adults with CMCs?

List of Abbreviations and Variable Terms

Cardiovascular (CVD)	Health Equity
<ul style="list-style-type: none">The leading cause of death in the US since the 1950's (Heron & Anderson, 2016)Kills one person every 34 seconds in 2020 (CDC, 2022)	<ul style="list-style-type: none">Health inequity causes preventable illnesses (Kim et al., 2020).Social, medical, and financial disparities

Cardiometabolic Conditions (CMCs): Hypertension, high cholesterol, coronary heart disease, and diabetes



Methods

The 2020 NHIS secondary dataset was analyzed using binary logistic regression. Andersen's behavioral model was the framework used to analyze health outcomes in relation to chronic diseases or conditions. Target population: 31,568 noninstitutionalized adults (18+) with a self-reported health status (HS) in the US. Next, the specific target population of participants that answered "yes" to cardiometabolic conditions of interest.

Cardiometabolic Condition	Responded "yes"
Hypertension	11,494
High Cholesterol	9,865
Coronary Heart Disease	1,901
Diabetes	3,356
Total "yes" to 1 or more *	26,616
Case Total	15,955

Results

Sociodemographic Descriptive Statistics

- Race: Predominantly White- 72.6%
- Sex: Slightly above half were women-52.7%
- Education: College educated- 72.8%
- Age: 65+ - 49.7%
- BMI: Overweight or obese- 73.6%
- Marital Status: half were married- 46.7%
- Work FT: No family members working FT- 55.2%.

Independent/Dependent Variables Descriptive Statistics

- DV: Excellent/Very Good- 57.65% versus or Other- 42.49%
- IV: Healthcare Access & Health Behaviors
- Wellness Visit: Last Appt- 81.3%
- Health Insurance: 96.1%
- Physical Activity: No activity- 51.2%
- Alcohol Status: Current drinkers- 65.5%

All nominal variables	Chi-square, df & Cramer's V (CV)— Effect size
Health status v/s wellness visits	$\chi^2 (1) = 78.38, p < .001$ —CV= 0.07 Small effect
Health status v/s insurance status	$\chi^2 (1) = 27.26, p < .001$ — CV= 0.04 Small effect
Health status v/s alcohol use	$\chi^2 (4) = 666.87, p < .001$ —CV= 0.21 Medium effect
Health status v/s physical activity	$\chi^2 (3) = 1135.43, p < .001$ —CV= 0.27 Medium effect
Health status v/s race/ethnicity	$\chi^2 (5) = 315.04, p < .001$ —CV= 0.14 Medium effect
Health status v/s age	$\chi^2 (3) = 72.05, p < .001$ —CV= .067 Small effect
Health status v/s sex	$\chi^2 (1) = 10.70, p < .001$ —CV= .026 Small effect
Health status v/s marital status	$\chi^2 (2) = 168.94, p < .001$ —CV= 0.10 Small effect
Health status v/s education	$\chi^2 (4) = 900.34, p < .001$ —CV= 0.24 Medium effect
Health status v/s family job status	$\chi^2 (3) = 299.72, p < .001$ —CV= 0.14 Small effect
Health status v/s BMI	$\chi^2 (3) = 461.36, p < .001$ —CV= 0.17 Medium effect

Results Cont.

- The null hypothesis was rejected for RQ1, RQ2, and RQ3 and the alternative hypothesis was favored.
- The strongest predictors by statistical significance and odds ratio paralleled the Cramer's V moderate effect size.

(Block 1) Top Results: Physical Activity & BMI

- Strengthening and aerobic PA had 3.75 times higher odds to select Excellent/ Very Good HS.
- Healthy weight had 2.16 times higher odds to select Excellent/ Very Good HS.
- Aerobic PA had 2.18 times higher odds to select Excellent/ Very Good HS.

(Block 2) Top Results: Education & BMI

- Both strengthening and aerobic PA had 3.07 times higher odds to select Excellent/ Very Good HS.
- Master's degree & above had 2.16 times higher odds to select Excellent/ Very Good HS.
- Current moderate AD had 2.10 times higher odds to select Excellent/ Very Good HS.

RQ3 Top Results: Education & BMI

- Master's degree & above had 2.90 times higher odds to select Excellent/ Very Good health status.
- Healthy weight had 2.16 times higher odds to select Excellent/ Very Good health status
- Bachelor's degree had 2.13 times higher odds to select Excellent/ Very Good health status

References on handout

Conclusion

Physical activity, education, and alcohol use status had significant effect sizes that paralleled the results. Research involving health equity outcomes is a national priority (CDC's Healthy People 2030 task), and this study will help inform future research, multiple stakeholders, and positive social change initiatives.



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