

Influence of age, sex, race, income and education in the cardiovascular health score. A cross-sectional analysis of ELSA-Brasil baseline data

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Background

The Cardiovascular Health (CVH) Score

7 metrics proposed by the American Heart Association

- (1) Diet (fruits and vegetables; fish; fiber-rich whole grains; sodium; sugar-sweetened beverages)
 - (2) Physical activity (moderate or vigorous)
 - (3) Smoking (never, time of quitting or current)
 - (4) Body-mass index
 - (5) Blood pressure (level and medication use)
 - (6) Fasting plasma glucose (level and medication use)
 - (7) Total cholesterol (level and medication use)
- Each classified as poor, intermediate or ideal
0 to 2 points per metric, score range: 0 to 14
Inadequate (0-4), Average (5-9), Optimum (10-14)

The Brazilian Longitudinal Study of Adult Health (ELSA-Brasil)

Cohort study focused on cardiovascular diseases and diabetes

15,105 civil servants aged 35-74 years in 6 centers (São Paulo, Vitória, Rio de Janeiro, Belo Horizonte, Porto Alegre, Salvador)

Objective

To describe CVH scores in ELSA-Brasil baseline and association with sociodemographic data

Methods

13,356 ELSA-Brasil participants without cardiovascular disease
Data from cohort baseline assessment
Quasi-Poisson regression models
Positive adjusted relative score differences (aRSD) values indicate higher CVH scores

Results

Optimal score in 2,486 (18.6%) participants.

Adjusted quasi-Poisson model results

Variable	aRSD	Group comparison
Age	-21.3%	Age 65-74 compared to 35-44
Sex	+5.8%	Women compared to men
Race	-7.2%	Blacks compared to Whites
Income	+6.9%	≥USD3,320 compared to <USD1,245
Education	+16.9%	College or above compared to up to incomplete high school

All significantly associated with CVH scores

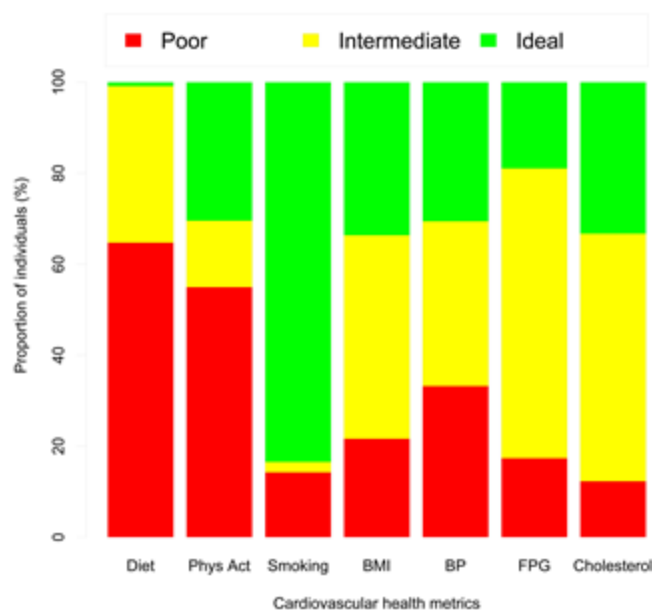
Conclusions

Few participants had optimum CVH score
Higher age, male sex, Black race, lower monthly income and lower educational level associated with low CVH scores

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Men (N=6,056)



Women (N=7,300)

