

ORIGINAL ARTICLE

Factors associated with diet quality among Brazilian individuals with cardiovascular diseases

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Abstract

Background

An individual's dietary pattern contributes in different ways to the prevention and control of recurrent cardiovascular events. However, the quality of the diet is influenced by several factors. The present study aimed to evaluate the quality of the diet of individuals with cardiovascular diseases and determine whether there is an association between sociodemographic and lifestyle factors.

Methods

This is a cross-sectional study carried out with individuals with atherosclerosis (coronary artery disease, cerebrovascular disease or peripheral arterial disease) recruited from 35 reference centres for the treatment of cardiovascular disease in Brazil. Diet quality was assessed according to the Modified Alternative Healthy Eating Index (mAHEI) and stratified into tertiles. For comparing two groups, the Mann–Whitney or Pearson's chi-squared tests were used. However, for comparing three or more groups, analysis of variance or Kruskal–Wallis was used. For the confounding analysis, a multinomial regression model was used. $p < 0.05$ was considered statistically significant.

Results

In total, 2360 individuals were evaluated: 58.5% male and 64.2% elderly. The median (interquartile range [IQR]) of the mAHEI was 24.0 (20.0–30.0), ranging from 0.4 to 56.0 points. When comparing the odds ratios (ORs) for the low (first tertile) and medium (second tertile) diet quality groups with the high-quality group (third tertile), it was observed that there was an association between diet quality with a family income of 1.885 (95% confidence intervals [CI] = 1.302–2.729) and 1.566 (95% CI = 1.097–2.235), as well as physical activity of 1.391 (95% CI = 1.107–1.749) and 1.346 (95% CI = 1.086–1.667), respectively. In addition, associations were observed between diet quality and region of residence.

Conclusions

A low-quality diet was associated with family income, sedentarism and geographical area. These data are extremely relevant to assist in coping with cardiovascular disease because

they enable an assessment of the distribution of these factors in different regions of the country.

Key points

A better diet quality was observed for individuals who practiced physical activity, with a medium or high family income, as well as for individuals residing in the Northeast region of Brazil. By contrast, poor diet quality was observed in individuals residing in the South Region. When analysing the level of education, the increase in the consumption of vegetables, whole grains and fruits was associated with education, being higher for those with 13 years or more of study ($p = 0.047$; $p = 0.012$) and 9–12 years of study ($p = 0.008$), respectively, compared to those who studied up to 8 years. These findings are relevant to understanding the factors that may be associated with diet quality in different regions of the country.

CONFLICTS OF INTEREST STATEMENT

The authors declare that there are no conflicts of interest.

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PEER REVIEW

The peer review history for this article is available at

<https://www.webofscience.com/api/gateway/wos/peer-review/10.1111/jhn.13184>.

DATA AVAILABILITY STATEMENT

Data sharing not applicable to this article because no data sets were generated or analysed during the current study.

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