

Research Brief

Sitting for Long Periods of Time and the Risk for Heart Disease Among Latino Adults in Massachusetts

Overview

Heart disease, or cardiovascular disease (CVD), is the leading cause of death in the United States. Latinos have higher rates of CVD and its risk factors, such as high blood pressure, high cholesterol, inactivity, obesity and type 2 diabetes. Sitting for long periods of time (sedentariness) is linked with the development of these risk factors, even if a person is physically active at other points in the day. Although sedentariness has been linked with increasing the risk for CVD among primarily White populations, studies among Latinos have shown mixed results.

Main Questions

- Does sitting for long periods of time increase the risk for cardiovascular disease among Latinos?
- Which group of Latinos are more sedentary?
- What is the relationship among sitting a lot and the different risk factors for heart disease?

Study

This paper presents results of an analysis of the Lawrence Health and Well Being Study of 602 Latino adults in the city of Lawrence, Massachusetts. Using a Community Based Participatory Approach, the study was conducted by the City of Lawrence Mayor's Health Task Force, the Lawrence Senior Center, the YWCA of Greater Lawrence, the Greater Lawrence Family Health Center and the University of Massachusetts Medical School. Study participants answered survey questions, including: age, gender, education, marital status, physical activity (including walking), and sedentary behavior (time spent sitting while doing different activities such as watching TV, using the computer, riding in a car or bus). Their weight, height, waist circumference, and blood pressure were measured. High cholesterol and type 2 diabetes diagnoses were obtained from medical records.

The Bottom Line

In this sample of Latino adults, sitting was related to obesity. It was not related to high blood pressure, high cholesterol, type 2 diabetes, or physical activity.

Source

Silfee V, Lemon S, Lora V, Rosal M. Sedentary Behavior and Cardiovascular Disease Risk Factors among Latino Adults. *J Health Care Poor Underserved*. 017;28(2):798-811. doi: 10.1353/hpu.2017.0075.

Contact

Valerie Silfee, PhD | Division of Preventive and Behavioral Medicine | Department of Medicine | University of Massachusetts Medical School, 55 Lake Ave N, Worcester, MA 01655 | Valerie.Silfee@umassmed.edu.

Funding Source: This research was generously supported by the 3), National Heart, Lung and Blood Institute (1T32HL120823-01), the Centers for Disease Control and Prevention (U48 DP005031-01), and the National Institute of Minority Health and Health Disparities (1 P60 MD006912-02).



Spotlight on Results

Characteristics of people who were more sedentary:

Age: Participants ages 21-24 were more sedentary (M = 9.21 SD = 5.68) than participants who were aged 35–54 years (M = 7.02, SD = 4.12) and participants over 55 years (M = 5.92, SD = 3.95).

Gender: Males (M = 7.90, SD = 4.92) were more sedentary than females (M = 6.73, SD = 4.62).

Education: Participants with a high school, college, vocational, post-graduates spent more time sitting than participants who did not graduate from high school.

Marital Status: Participants who were single spent more time sitting than those who were married or previously married.

Sedentary behavior and CVD factors

BMI/Waist: Sedentariness was significantly associated with BMI ($\beta = .164, p < .001$) and waist circumference ($\beta = .162, p < .001$).

CVD factors: Sedentariness was not associated with blood pressure, high cholesterol (OR = 1.03, $p = .260$), or type 2 diabetes (OR = 1.04, $p = .135$).

Physical Activity: Sedentariness was not significantly associated with physical activity (OR = 1.01, $p = .724$).

Call for Action

It is important to look at how CVD risk factors in different groups of people vary in order to decide what to include in interventions.