Editorial

Hispanics and Cardiovascular Health and the “Hispanic Paradox”: What is Known and What Needs to be Discovered?

This issue of Progress in Cardiovascular Diseases is devoted to cardiovascular (CV) health in Hispanics. Hispanic or Latino is an ethnicity defined as an individual of any race who has origins in Mexico, the Caribbean, Central America, South America or other Spanish-speaking countries. Because it is an ethnic definition and not a race, Hispanics might be whites or blacks. There are more than 53 million Hispanics living in the United States (US), representing 17% of the total US population and the largest minority group in the country. Hispanics also represent the fastest growing racial or ethnic population in the US. Indeed, Hispanics are expected to become the majority in California in 2014, the most populated state of the Union. Hispanics also represent the fastest growing aging population, as the population of Hispanics aged 65 years or older is projected to increase by 330% by 2020.

Hispanics represent a very heterogeneous ethnic group with different customs and traditions depending on the country of origin. The heterogeneity expands to lifestyle and healthy habits with significant differences in smoking rates, physical activity, and other behaviors when comparing sub-groups of Hispanics. However, despite the seemingly heterogeneous nature of Hispanics as an ethnic group, they do share several important features beyond the language, including several sociodemographic factors like familism, personalism, faith, spirituality, and religious values. It is not uncommon among Hispanics to have people from different generations living in the same household, sharing expenses and financial support. In many Hispanic families, there is a perceived obligation to provide family members with material and emotional support, extended to second-degree relatives. Hispanic families are generally recognized as amplified or extended, consisting of a nuclear family and second-degree relatives, as well as non-blood relatives growing up together, considered as an extension of the family. The concept of familism has been broadly defined as placing one’s family above oneself and emphasizing interdependence over independence. Hispanic families are mostly Roman Catholic and report a high sense of spirituality over material satisfaction. Many of those cultural features, along with dietary patterns, tend to change after Hispanics immigrate into the US and become acculturated.

Why publish an issue focused on CV disease (CVD) in Hispanics? The three main reasons why studying and understanding CV health among Hispanics is extremely important include:

1. Because of the large segment of the US population they represent and will continue to grow in the next decades;
2. Because there are more than half a billion Hispanics in the world with a disproportionately low number of research studies assessing the CV problems of Hispanics in and outside the US; and
3. Because understanding the “Hispanic Paradox”, the finding that Hispanics in the US have a lower rate of CVD mortality and the longest life expectancy among the three largest ethnic/racial groups, despite a higher prevalence of CVD risk factors and disadvantageous socio-economic conditions, represents a unique opportunity to identify a possible protective mechanism, either genetic, nutritional, or social-cultural that may be applicable to non-Hispanics in the prevention of CVD.

Hispanics living in the US represent the ultimate paradigm of healthcare disparities. With the highest rate of uninsured people, the lowest rates of screening for hypercholesterolemia, hypertension, and other CVD risk factors, with the lowest rates of smoking counseling and with the poorest levels of blood pressure control, glycemic control, and other measures of deficient quality of care, Hispanics represent a tremendous challenge to the healthcare system and public health. The problem with disparities expands beyond healthcare coverage, quality of services and outcomes, but includes the meager number of epidemiologic studies, studies assessing healthcare services, and sociodemographic studies specifically studying Hispanics. With the exception of the Study of Latinos and a handful of smaller epidemiologic studies, the limited CV research focused on Hispanics leaves many unanswered questions for clinicians, policymakers, and healthcare administrators on how to improve the health problems of this minority group. The recent publication by Rodriguez, et al., on the status on CVD and stroke in...
Improving CV health among Hispanics is and will continue to be challenging, given the heterogeneity of Hispanics according to their country of origin, variety in their identity, and significant differences between Hispanics born outside versus those born inside the US. Nonetheless, the common factors among different “kinds” of Hispanics might help clinicians and policymakers to better understand the Hispanic culture and address their CV health in an effective and efficient way.

Cardiovascular disease is the most common cause of death in every Latin American country and in Spain, while the prevalence of CVD risk factors continues to grow in the region. In contrast with this public health emergency, there are very few epidemiologic studies available to better understand the problem of CVD in Latin America. For example, incidence rates for myocardial infarction, stroke, and heart failure are largely unknown in Latin America, and the few epidemiologic studies in the region focused on CVD were performed in clinical settings. Prospective cohort studies assessing the incidence of CVD risk factors are almost nonexistent, and most of what is known about CVD in Latin America is based on retrospective studies. Some recent remarkable efforts to better understand the prevalence of CVD risk factors in Latin America have been performed with limited funds coming from international organizations, not local resources. National governments, for years focused on the prevention and control of communicable diseases, will have to set as a major priority the prevention and treatment of CVD or their systems will be bankrupt dealing with this epidemic in the next 20 years. Based on several of the papers in this same issue of the Journal, it is clear that primary and secondary prevention of CVD has not been a priority in Latin America. The fact that the state of Illinois has the same number of cardiac rehabilitation centers as all South America says it all.

Finally, the existence of the “Hispanic Paradox”, the interesting finding that Hispanics have the longest life expectancy among the three main ethnic/race groups in the US, this in despite of the negative CVD risk profile and low socioeconomic status, represents a major opportunity to identify a protective factor for CVD applicable to the rest of the population. Historically, the French paradox, and, for that matter, the Mediterranean paradox, where consumption of animal fat is high but CV death rates are lower in France and other Mediterranean countries than in the rest of Europe, helped to identify the benefits of the Mediterranean diet and wine consumption. Because of the limited research addressing the underpinnings of the Hispanic Paradox, the factor that will explain the unexpected lower CVD mortality and longest life expectancy among Hispanics is yet to be identified.

Investigators trying to explain the paradox as a result of bias have failed to convincing prove that the paradox is artificial. A recent meta-analysis demonstrated a consistent pattern of lower CVD mortality among Hispanics across studies confirming the existence of the paradox.

Whether it is a genetic trait, a nutritional component, or a result of favorable social dynamics, what explains the Hispanic paradox is still to be determined. Regardless of the nature of this elusive factor to explain the Hispanic Paradox, such a factor surely has a very strong protective effect, so it can explain the lower CVD mortality and longer adjusted life expectancy among Hispanic men and women compared to non-Hispanic whites and African Americans. This paradox is strong enough to overcome the disadvantageous effect of a lower socioeconomic status, income, educational level, health literacy, quality of healthcare, insurance coverage and eligibility for Medicaid, and the highest employment in high-risk occupations, the barriers for healthcare due to language, a higher prevalence of hypertension, diabetes, central obesity and atherogenic lipid profiles, lower rates of hypertension treatment and control, among several other factors that predict cardiovascular outcomes and mortality. However, as much as the Hispanic Paradox could represent an opportunity in CV epidemiology to identify a possible protective factor, this idea should not distract policy makers, investigators and scientific organizations from addressing the implications of CVD in Hispanics. After all, CVD is the most common cause of death and disability in Hispanics inside and outside the US.

Paradox can be defined as a statement that is seemingly contradictory or opposed to common sense and yet is perhaps true. As the Chinese philosopher, Lao Tzu, once said in the spirit of Tao, “The words of truth are always paradoxical; therefore, this Hispanic Paradox is what we may call “the paradox of the paradoxes”.

Acknowledgments

Francisco Lopez-Jimenez is supported by the European Regional Development Fund – Project FNUSA-ICRC (No. Z.1.05/1.1.00/02.0123).

REFERENCES


Francisco Lopez-Jimenez
Division of Cardiovascular Diseases, 200 First Street S.W.
Rochester, MN 55905
E-mail address: Lopez@mayo.edu

Carl J. Lavie
Department of Cardiovascular Diseases, John Ochsner Heart and Vascular Institute, Ochsner Clinic School-the University of Queensland School of Medicine, New Orleans, LA.