Studies Need More Hispanics to Unravel Paradox

BY PATRICE WENDLING

CHICAGO — Although Hispanics are grossly underrepresented in heart failure trials, emerging evidence suggests they have unique risk factors and heart failure outcomes that should be taken into clinical consideration.

The evidence also underscores the importance of recognizing the vast heterogeneity of Hispanics, Dr. Ileana Piña said at a meeting sponsored by the International Society on Hypertension in Blacks.

"Hispanics represent a cultural group, not a racially identifiable group," the Cuban-born cardiologist said. "You can't lump them all together."

But that's exactly what has happened. Until the Medicare enrollment files were changed in 1994, Hispanics or Native Americans were simply classified as either "white" or "black." It wasn't until the 2000 U.S. census that the term "Hispanic" was changed to "Spanish, Hispanic, or Latino" to describe persons of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.

Several studies have made the observation—dubbed the "Hispanic paradox"—that Hispanics have lower all-cause and cardiovascular mortality, despite increased obesity and diabetes, and lower socioeconomic status, said Dr. Piña, professor of medicine at Case Western Reserve University in Cleveland, and a Veterans Affairs National Quality Scholar.

In a study of Medicare enrollees aged 65 years or older, Hispanics were 1.2 times more likely to be hospitalized for heart failure than were whites, while blacks were 1.5 times more likely. But after adjustment for sex and age, in-hospital mortality was significantly lower among Hispanics and blacks than among whites (Am. Heart J. 2005;150:448-54). A California study also showed that blacks and "Latinos" initially hospitalized with heart failure in 1991 or 1992 were more likely to be rehospitalized than were Asians and whites, but were less likely to die during the 12-month follow-up period (Am. Heart J. 1999;137:919-27).

Sociocultural factors are often used to explain the Hispanic paradox, but more recent data are causing some to rethink the paradox or at least to differentiate Hispanics by birthplace. Among diabetics in the San Antonio Heart Study, age- and sex-adjusted hazard ratios indicated that U.S.-born Mexican Americans have a 66% greater risk of all-cause mortality and of cardiovascular mortality, compared with non-Hispanic whites, while Mexico-born Mexican Americans appeared to be at similar risk (Diabetes Care 2002;25:1557-63).

A recent "state-of-the-art" paper on the subject notes that Hispanic ethnicity is marked by a disproportionate cardiometabolic risk burden, largely because of exceedingly high rates of insulin resistance. The authors hypothesize that "the central concept of insulin resistance—compounded by inflammation and neuroendocrine overactivity—may be a predominant etiologic factor for cardiomyopathy in Hispanics" (J. Am. Coll. Cardiol. 2009;53;1167-75).

The authors go on to call for greater representation in patient registries, research studies, and clinical trials, a call echoed by Dr. Piña. Hispanic or Latino patients made up just 3% of HF-ACTION (Heart Failure: A Controlled Trial Investigating Outcomes of Exercise Training), she noted, yet they make up about 15% of the total U.S. population. Still, among nine recent major heart failure trials, HF-ACTION was the only trial that specifically differentiated Hispanics, instead of lumping them together with other ethnicities as "nonwhites" or "other."

"If you think the inclusion of women in heart failure trials is poor, inclusion of Hispanics is horrendous," she said.

Greater elucidation of heart failure risk factors and outcomes in Hispanic populations could lead to more targeted therapies and risk modification. With one in three U.S. residents expected to be Hispanic by 2050, there is great urgency to act, Dr. Piña said.

Dr. Piña disclosed serving as a speaker for AstraZeneca, Novartis, and Merck, and as a consultant for the Food and Drug Administration. ■