

# The broader reach of racial disparities

Salvador Cruz-Flores,  
MD, MPH

Correspondence & reprint  
requests to Dr. Cruz-Flores:  
cruzfls@slu.edu

*Neurology*® 2012;79:623–624

Racial and ethnic minorities constitute 28% of the population in the United States, a percentage that is projected to double by 2050. The growing proportion of racial and ethnic minorities in the United States increases the need to understand the determinants of racial-ethnic disparities in health care, so as to be able to reduce them.<sup>1</sup> Although the goals of the Centers for Disease Control plan Healthy People 2010 was to eliminate racial disparities in health care, disparities continue to exist in cardiovascular disease and stroke with a greater burden of these conditions, their risk factors, and mortality among African Americans, Hispanics, American Indians/Alaskan Natives, and Asians. Yet little data exist on the distribution and determinants of stroke in general and intracerebral hemorrhage (ICH) and in particular, among Native Hawaiians/Pacific Islanders (NHPI),<sup>1–4</sup> who have not been studied directly. In this issue of *Neurology*®, Nakagawa et al.<sup>5</sup> shed some light in this little-explored area.

Using the American Heart Association's national quality improvement program Get With The Guidelines database for stroke, the investigators did a retrospective analysis of all patients with ICH admitted to their tertiary referral center, hypothesizing that NHPI would be younger with a greater burden or risk factors compared with other racial/ethnic groups. Their results show that NHPI with ICH indeed are younger, have a higher burden of diabetes mellitus and hypertension, have a larger body mass index, stayed longer in the hospital, and had a lower mortality. The authors went on to explore the determinants of ICH in those younger than 45 years of age and found that being NHPI was a predictor. However, contrary to the way it is described in the article, the vascular risk factors did not predict ICH in the young. The authors addressed the limitations of their study, including the single center nature of it and the potential for referral bias. Other limitations that are worth mentioning include the lack of adjustment for socioeconomic and insurance status, which are factors that can confound the association of belonging to a racial or ethnic minority group with access to care.

In addition, other clinical factors that can affect outcome besides the ICH volume, such as ICH score or Glasgow Coma Scale score, are not clearly described or analyzed.

There are questions that remain unanswered. First, what causes ICH in the very young NHPI? In this study, common vascular risk factors were not predictive. The authors speculate about the potential role of substance abuse that has a higher prevalence in this racial group in previous reports.<sup>6</sup> Second, what are the determinants of a longer hospital stay in NHPI with ICH? The discharge disposition, whether to home, skilled nursing facility, or rehabilitation, does not provide a hint as to the reason why these younger patients with an ICH of similar size, compared to their older counterparts, stay longer in the hospital. However, since transfer from another hospital was a predictor for ICH in the young, it is possible that the location of their home was a factor prolonging the hospital stay. The role of socioeconomic or insurance factors also cannot be excluded. These questions highlight the levels of complexity of analyses of determinants and distribution of disparities, which include biological, environmental, and social factors.<sup>1,4</sup>

In the broader view, the results supported the hypothesis that disparities also exist for the NHPI group. Clearly more studies are necessary, looking to uncover the presence of disparities and their determinants for more specific minority groups. However, the more important message is that the time has come for more aggressive funding of research to develop stroke interventions using effective and culturally appropriate methods with the goal of reducing disparities in minority communities. That call was answered by the recently released request for applications, RFA-NS-12-007 Stroke Prevention/Intervention Research Program (SPIRP) (U54).<sup>7</sup> We can only hope that more requests for applications such as this will follow. In other words, it is time to multitask while addressing disparities: “Keep on diagnosing but start treating the gap!”

See page 675

From the Department of Neurology & Psychiatry, St. Louis University School of Medicine, St. Louis, MO.

Go to [Neurology.org](http://Neurology.org) for full disclosures. Disclosures deemed relevant by the author, if any, are provided at the end of this editorial.

## DISCLOSURE

S. Cruz-Flores receives honorarium as consultant and member of clinical events committees for Quintiles, Roche, Biotronik, and Axio. **Go to [Neurology.org](http://Neurology.org) for full disclosures.**

## REFERENCES

1. Cruz-Flores S, Rabinstein A, Biller J, et al. Race-ethnic disparities in stroke care: the American experience: a statement for healthcare professionals from the American Heart Association/American Stroke Association. *Stroke* 2011;42:2091–2116.
2. Sacco RL, Boden-Albala B, Abel G, et al. Race-ethnic disparities in the impact of stroke risk factors: the Northern Manhattan Stroke Study. *Stroke* 2001;32:1725–1731.
3. Labovitz DL, Halim A, Boden-Albala B, Hauser WA, Sacco RL. The incidence of deep and lobar intracerebral hemorrhage in whites, blacks, and Hispanics. *Neurology* 2005;65:518–522.
4. Stansbury JP, Jia H, Williams LS, Vogel WB, Duncan PW. Ethnic disparities in stroke: epidemiology, acute care, and postacute outcomes. *Stroke* 2005;36:374–386.
5. Nakagawa K, Koenig MA, Seto TB, Asai SM, Chang CW. Racial disparities among Native Hawaiians and Pacific Islanders with intracerebral hemorrhage. *Neurology* 2012;79:675–680.
6. Edwards C, Giroux D, Okamoto SK. A review of the literature on Native Hawaiian youth and drug use: implications for research and practice. *J Ethn Subst Abuse* 2010;9:153–172.
7. US Department of Health and Human Services. NIH: National Institute of Neurological Diseases and Stroke. Available at: <http://grants.nih.gov/grants/guide/rfa-files/RFA-NS-12-007.html>. Accessed April 4, 2012.