In the current issue of *Stroke*, Stansbury et al provide a broad survey of ethnic disparities in stroke. Going beyond the frequently covered topics of incidence and mortality, this selected review of literature published from 1991 to 2003 considers ethnic variations in risk factor profiles, acute care, and the more chronic issues of use of rehabilitation services, functional outcomes, and recurrent stroke prevention. Data are most prevalent regarding black/white differences, allowing for firmer conclusions regarding disparities between these groups than can be drawn regarding other minority groups. Similarly, examination of the more easily and frequently measured variables of incidence and severity yields clearer conclusions, but the authors are to be commended for drawing attention to less well-studied but equally important areas of possible disparity.

The authors focus on race or ethnicity (preferring the latter designation) as a construct primarily characterizing cultural and socioeconomic factors that relate to issues of access, societal discrimination, or behavioral variation more than they do genetics or biology. This seems entirely appropriate given that the biological effects of risk factors and medications are generally consistent across ethnic or racial groups, and the degree of genetic homogeneity within the groups considered is limited.1

This review confirms what is probably already well recognized in the medical community: the increased incidence in stroke and stroke mortality among black Americans; but it points out that this phenomena extends to intracerebral and subarachnoid hemorrhage as well as ischemic stroke. Among traditional risk factors, the review confirms that hypertension is more prevalent among black and Hispanic patients and atrial fibrillation more common among white, non-Hispanic stroke patients, but overall, the literature apparently does not seem to demonstrate large discrepancies in the risk factor profiles among different ethnic groups. In the less well-studied area of acute stroke care, there appears to be less consensus, but perhaps some meaningful trends emerge. The overall delay from symptom onset to care may not vary by ethnicity, but whites are more likely to present in the crucial <3-hour time window, increasing their potential access to intravenous thrombolysis. A lesser intensity of diagnostic evaluation also seems to put blacks at a disadvantage, although this may be explained by a relative lack of access to neurological expertise rather than a different level of care being rendered by similar physicians. However, these disparities do not seem to translate into dramatically longer lengths of stay.

The data reported regarding postacute care are remarkable for their heterogeneity, with no clear-cut preponderance of evidence of ethnic disparities regarding use of rehabilitation services such as physical therapy or length of inpatient rehabilitation stays. Similarly, the data regarding functional outcome do not provide consistent evidence of any disparity. Interestingly, whereas blacks were less likely to return to work in a study conducted early in the time period considered, this was no longer true in a study published in 1999, raising the question of secular trends in disparities. Although a definitive answer is beyond the already broad scope the authors set for themselves and may be unapproachable given existing data, this observation suggests the possibility that something may actually be improving.

Recently, several additional reports of data that bear on these issues have served to further underscore some of the key issues raised in the review of Stansbury et al. Data from the baseline evaluations of subjects enrolled in the African American Antiplatelet Stroke Prevention Study demonstrate a significant lack of awareness and control of stroke risk factors.2 Among 383 known diabetics with serum glucose levels assessed at baseline, 32% had levels ≥200 mg/dL, and 48% of the 143 subjects with no history of hypertension had blood pressure ≥140/90 mm Hg. Only 30% of the subjects treated for hypertension had a blood pressure <140/90 mm Hg. Undertreatment of hypercholesterolemia was equally apparent: 24% of those with no history of hypercholesterolemia had cholesterol levels ≥240 mg/dL, and 38% of those on a lipid-lowering agent had levels in that range. A population-based case-control study in the United Kingdom extended the findings evident in American blacks to the United Kingdom. This study estimated the population-attributable risk (PAR) associated with traditional risk factors among black African, black Caribbean, and white south Londoners, producing data similar to those found in American studies: hypertension and diabetes produced higher PARs and atrial fibrillation a lower PAR, among blacks.3 A recent prevalence study based on household interviews conducted in the United States from 1999 to 2001 reported a prevalence of stroke survivors 1.65× greater among blacks than whites. Among stroke survivors, hypertension, diabetes, being overweight, and inactivity were more prevalent in blacks and Hispanics relative to white non-Hispanics.4 These additional studies lend further credence to the importance of targeting these risk factors in recurrent stroke prevention efforts among minorities.

Racial and ethnic minorities have an increased risk and ongoing burden of stroke. They also tend to have lower-quality health care. The complex roots of these disparities include access factors such as insurance and income status, patient factors such as mistrust of the health care system and lower levels of health literacy, and physician factors such as stereotyping and lack of cultural sensitivity, yet they remain poorly understood. To address the challenge presented by the lack of understanding of how these disparities may best be eliminated, in November 2002, the National Institute for Neurological Disorders and Stroke convened a Stroke Disparities Advisory Panel that produced a series of recommendations regarding scientific priorities for addressing disparities in stroke. The recommendations included characterizing temporal trends in racial and ethnic disparities and identifying PAR and risk interactions, evaluating the contributions of factors relating...
access to quality of care such as insurance status and provider altitudes, identifying barriers to adherence to stroke prevention strategies specific to minority groups, and investigating how race/ethnicity affects access to and the quality of stroke rehabilitation services. The comprehensive review presented in this month’s Stroke begins to address these issues by summarizing the current state of knowledge and emphasizes the importance of continuing to address these concerns.

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