# HEALTH

## AHA SAYS "BRAIN ATTACKS" HIT AFRICAN-AMERICAN HARDER

DALLAS, Texas, — Thousands of African-Americans are incapacitated or killed by stroke each year. And evidence that "strokes target blacks preferentially is overwhelming and indisputable," says Edward S. Cooper, M.D., the first black to serve as president-elect of the American Heart Association.

These crippling, death-dealing "brain attacks," caused by blockages or ruptures in the blood vessels suppling the brain, strike twice as often among blacks as among the white population. Stroke also strikes blacks with much greater severity and at a much earlier average age. Black males in the prime of life are at especially high risk.

While the overall stroke death rate in the U.S. has been declining for more than 40 years — and dropping even more rapidly since advancements in the treatment of high blood pressure in the early 1970s — the percentage of black stroke victims is still approximately double that of whites.

The gravity of the situation was summed up by Louis R. Caplin, M.D., chairman of the department of neology at Tufts New England Medical Center in Boston, when he spoke at the AHA's recent Editors Conference on Cardiovascular Disease in African-Americans. As Caplan put it:

"Stroke is more common in blacks and has a higher mortality rate. It's a more important problem relatively in blacks than whites, and if you look at studies in younger people, those under 65, the figures are even more impressive. Blacks have a death rate three or four times higher in younger patients, and the risk is particularly high in young African-American men."

Caplan cites one authoritative study conducted in the 1980s that showed the rate of fatal strokes among blacks to be 208 per 100,000 population compared to just 109 per 100,000 for whites. Other research, he adds, shows that strokes are not only more prevalent — and deadly — among blacks, but are also physiologically different in many cases from the strokes suffered by white patients.

For one thing, the obstructions that block blood vessels suppling blood to the brain seem to occur in different locations in blacks than in whites, Caplan says. These blockages are seen more often in arteries inside the head in blacks, while in whites they are found more frequently in arteries in the neck and outside the head. Also, blacks appear the be disproportionately affected by cerebral hemorrhages as well as by breakdowns in small blood vessels that lead to loss of memory and motor skills and general mental impairment.

"Vascular dementia is usually due to small vessel problems, and it is much, much more prevalent in African-Americans than in whites," Caplan says. "Blacks tend to have gradual, slowly developing strokes, whereas in the white population, there are more very sudden strokes."

Not only that, but research indicates that the whole process of how blood vessels become blocked is somehow different in blacks. "In whites, our studies show you have a buildup of arterial plaque that decreases blood flow," Caplan says, "but in blacks, you have changes in the muscular coat of the artery, so that the blood vessel thickens, producing a chronic depravation of blood flow."

Now that these race-based differences and the resulting high risk to blacks have been clearly identified, researchers are increasingly focusing their efforts on answering two questions: What causes the disparity in the first place? And what can be done about it?

One of the key factors in both questions, most experts agree, is the high incidence of high blood pressure among blacks. High blood pressure is a major cause of strokes among both blacks and whites, but the condition is much more widespread among blacks and is more likely to be inadequately treated. It also tends to strike them earlier in life and with greater severity, exacting a terrible toll in strokes and end-stage kidney disease.

The reasons for this are not entirely clear, says Elijah Saunders, M.D., president of the International Society on Hypertension in Blacks and head of the division of hypertension at the University of Maryland Hospital in Baltimore. But an interaction of genetic and environmental factors probably plays a role in blacks' predisposition to high blood pressure, Saunder adds.

"There must be a conglomeration of environmental circumstances that operate on individuals who are predisposed by genetic factors," he says. Among such circumstances adversely affecting blacks may be higher levels of obesity and socioeconomic stress, heavier cigarette smoking and alcohol consumption, as well, Saunders points out. He cities a recent visit to a hospital in Birmingham, England, where black immigrants from the Caribbean accounted for one-third of malignant hypertension cases while making up only a small percentage of the population in Birmingham.

Oddly enough, however, blacks in Africa are not similarly affected . "We don't see a lot of hypertension in Africa, at least as Africa currently exists," Saunder says. "So it may be the Western lifestyle with certain stresses and dietary habits associated with it that is more of a factor than genetics themselves."

Programs based in churches, worksites, housing projects and community centers are now successfully detecting and treating high blood pressure among blacks who not long ago were beyond the reach of the nation's health care systems, and Saunders believes this is helping.

"We think that increased awareness of high blood pressure and increased efforts to get people on medication and keep them there are reducing the incidence and prevalence of stroke in our community," he says. "Malignant or accelerated hypertension has also been reduced. We don't see as many people with the kind of 'galloping' hypertension that kills within six months."


But intensified research efforts, such as a major study just launched by the National Heart, Lung, and Blood Institute on the mechanisms of high blood pressure in blacks, will be vital if progress is to continue. And massive efforts in public education are absolutely vital if stroke's lethal discrimination against African-Americans is to be stopped.

"There is still an urgent need for special programs to control cardiovascular disease and stroke in blacks and other racial minority groups," says Cooper. "We must target uniquely designed high blood pressure detection and control programs to the many hard-to-reach blacks. It is well-documented that many disadvantaged racial minorities have less access to health services."

Louis Sullivan, M.D., secretary of the U.S. Department of Health and Human Services, sees the media playing a key role in disseminating health information to minority citizens,

"We need the minority media to devote more attention to the strategies of health promotion and disease prevention," Sullivan told the recent AHA conference. "We need mainstream media to call attention to the heavy burden of needless deaths suffered by minority communities."

As Cooper concludes: "To bridge the racial gap and defeat heart disease and stroke for all Americans, we must have a concerted effort to cut the social chain that looks out disadvantaged minorities."

Only then will strokes be prevented and banished from the entire American society.

For more information, send a stamped, self-addressed business-size envelope to American Heart Association, Box NPA-F, 7320 Greenville Ave., Dallas, TX 75231.