Closing the Knowledge, Treatment, and Outcome Gap

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The data on cardiovascular disease in African Americans are striking. 1) Life expectancy is approximately 6 years shorter for African Americans than for the general U. S. population. 2) The leading contributor to this shortened lifespan is cardiovascular disease (CVD).[1] 3) African Americans die younger and have higher mortality rates from coronary heart disease (CHD) than do Whites, American Indian/Alaska Natives, Asian/Pacific Islanders, or Hispanics.[2] 4) African American women are at particular risk, with CHD mortality rates 35.3% higher and stroke rates 71.4% higher than those for white women.[3]

The Gap Is Increasing

The CHD morbidity and mortality gap between African Americans and other groups is increasing. Age-adjusted death rates were similar between African Americans and the general United States population in the 1970s,[4] but by 1994 the rate among African Americans was 14% higher than in Whites.[5] Closing this gap will require concerted efforts on at least 3 fronts: research, treatment, and access.

Table 1
Rates of African American Inclusion in Selected Major Cardiovascular Trials

Study	Year	Study treatment	African Americans, %	N
MRFIT[6]	1973	Risk factor intervention study	5.6	361,662
CASS[7]	1974	Medicine vs surgery for stable angina	2.4	23,581
SOLVD[8]	1986	ACE inhibitors for ventricular dysfunction	9.5	4228
SPAF[9]	1987	Anticoagulation for atrial fibrillation	6.0	1330
BARI[10]	1988	PTCA vs CABG for multivessel coronary disease	6.0	1829
GUSTO I[11]	1990	Thrombolytic therapy for myocardial infarction	2.8	41,021
GUSTO-IIb[12]	1994	Heparin vs hirudin for acute coronary syndromes	3.1	12,142
PURSUIT[13]	1995	Eptifibatide for acute coronary syndromes	5.0	10,948
ALLHAT[14]	2002	Antihypertensive and lipid lowering	35	42,448

ACE, angiotensin-converting enzyme; CABG, coronary artery bypass graft; PTCA, percutaneous transluminal coronary angioplasty.

Research

African Americans are often underrepresented in cardiovascular trials (Table 1).[6-14] Recent studies such as the National Institutes of Health (NIH) sponsored Antihypertensive and Lipid-Lowering Treatment to Prevent Heart Attack Trial (ALLHAT) and the currently ongoing Multi-Ethnic Study of Atherosclerosis (MESA) specifically attempt to correct this deficiency; however, added research is desperately needed. In addition, further investigation into the vascular biology, genetics, and pharmacology in unique populations is also essential. Finally, research into the social and environmental factors influencing CHD in African Americans must continue.

Treatment

Several studies have confirmed what has been suspected for some time. African Americans are less likely to be offered appropriate diagnostic testing, aggressive interventional treatments, and life-saving drug therapy.[15-19] The means of correcting these deficiencies must be sought. There is encouraging evidence that cardiovascular performance-improvement systems can help to encourage the use of guideline-recommended therapies and decrease or even erase the inequities in treating heart disease. The American Heart Association's "Get With the Guidelines" program, for example, is a hospital-based quality improvement program designed to assist healthcare providers in taking care of CHD patients with the most updated treatment guidelines and tools. Application of this program has been shown to markedly improve the use of evidence-based, guideline-recommended therapies and decrease gender disparities in heart disease treatment.[20] Widespread implementation of such programs at hospitals and outpatient medical practices across the country is urgently needed.

Access

Although many factors affect CHD risk in African Americans, higher rates of lack of health insurance and other barriers to obtaining health services undoubtedly contribute. Today there is much discussion about access to health care for vulnerable populations. Low-income minority groups experience the most acute barriers in access to care; however, higher-income Hispanics and African Americans also confront barriers. If further gains in reducing racial/ethnic disparities are to be achieved, a combination of strategies will be required in order to improve healthcare access. In addition, systems of care that are culturally competent must be put in place.

Conclusion

Enormous declines in cardiovascular disease mortality have occurred in the United States since the 1960s. Nevertheless, the cardiovascular mortality gap between African Americans and the rest of the U.S. population has widened. Strategies for the prevention and control of this epidemic must be aggressively pursued and interventions specifically targeted to closing the CHD mortality gap must be sought. ■

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