

**SPECIAL ISSUE**

*disparities and discrimination in  
health care and health outcomes*

**DISPARITIES  
AND DISCRIMINATION IN  
HEALTH CARE**

*an introduction*

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**ABSTRACT** Racial disparities in health care and health outcomes are a disturbing feature of the American health care system. Efforts to reduce or ameliorate these disparities must be informed by an understanding of the factors that underlie and contribute to them. The papers in this issue are based on a recent conference that was held at the University of Chicago to address this problem. Socioeconomic status is an important determinant of health, and socioeconomic disparities are major determinants

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of the racial disparities in health. These socioeconomic disparities are complicated by access to health insurance, geographic factors, and unhealthy behaviors. Geographic disparities, both regional and local, also contribute to racial disparities in health. Moreover, current disparities in the health of adult populations may reflect socioeconomic disparities that prevailed during their intrauterine or early infant development. There seems little evidence that either overt or unconscious discrimination on the part of physicians is an important cause of racial disparities in health; blaming physicians for this problem is counterproductive. Improving the quality of medical care holds the promise not only of improving health for all Americans, but of decreasing the racial disparities in health care that are so troubling today.

RECENT NEWSPAPER HEADLINES such as “Risk of Fatal Stroke is Greatest for Blacks, Government Says,” “Study Finds Racial Gap in Heart Disease,” “Racial Gap Seen for Prescriptions,” and “Study Finds Racial Differences in the Use of Feeding Tubes” have called public attention to racial disparities in health care and health outcomes in the United States (AP 2003; Anderson 2003; McNeil 2003; Reuters 2003). Perhaps in response to public concern with this issue, Senate Majority Leader Bill Frist, in his first speech on the House floor, announced that one of his priorities would be to reduce disparities in health care in the United States (Firestone 2003). Elimination of health disparities is also one of the key objectives of the government program Healthy People 2010. Racial disparities in health care and health outcomes have also received scholarly attention, most notably in the Institute of Medicine report, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare* (Smedley, Stith, and Nelson 2003). In November 2003, the MacLean Center for Clinical Medical Ethics, the Law School, the John M. Olin Program in Law and Economics, and the Harris Graduate School for Public Policy Studies at the University of Chicago organized an interdisciplinary conference, “Disparities and Discrimination in Health Care and Health Outcomes,” to address the topic. This supplement includes many of the papers presented at the conference.

Evidence of racial disparities in health outcomes in the United States is clear and disturbing. According to recent data from the Centers for Disease Control, for example, life expectancy at birth in the United States was 77.8 years for whites (75.3 years for white males, 80.3 years for white females) and 72.5 years for blacks (68.9 years for black males, 75.7 years for black females); age-adjusted mortality rates were 831/100,000 for whites and 1,081/100,000 for blacks; and infant mortality rates were 5.8/1000 for whites and 14.3/1000 for blacks (CDC 2004). Blacks not only have lower life expectancies than whites, but they spend a greater portion of their lives in poor health, or with physical or activity limitations (CDC 2003). These disparities represent a tragic loss of life and health, and violate our sense of racial equity and justice. Unfortunately, while it is easy to document racial disparities in health, it is much more difficult to elucidate and untangle the causes of these disparities. Nonetheless, effective and meaningful

policy responses require a clear understanding of the factors that underlie and contribute to these disparities, and the relationships between these factors.

### DISPARITIES IN HEALTH CARE

Many studies have documented racial disparities in health care (Smedley, Stith, and Nelson 2003). These disparities exist for the care of patients with a wide variety of diseases. Thus, black patients with acute myocardial infarction are less likely to receive coronary angiography or coronary artery bypass grafts than are whites; black patients with cancer are less likely to receive the standard of care for their particular cancer; black patients with end-stage renal disease are less likely to receive kidney transplants; and black patients with HIV are less likely to receive appropriate antiretroviral and prophylactic antibiotic treatment. In all of these instances, racial disparities in health care are associated with disparities in health outcomes; blacks suffer higher mortality rates from all of these diseases than whites (Smedley, Stith, and Nelson 2003).

Despite this association, however, the causal role of disparities in health care as a determinant of disparities in health outcome is not always clear. Moreover, the determinants of the disparities in health care are themselves complex. Thus, although a reduction in health care disparities may be a laudable goal, it may be difficult to achieve and may not by itself eliminate disparities in health outcome. For example, although cooperative trials for the treatment of childhood cancers can largely eliminate racial disparities in the care of children who are enrolled in these trials, minority children still suffer higher mortality from cancer than do white children (Kadan-Lottick et al. 2003; Liu et al. 2003). These differences apparently reflect patient-specific characteristics not related to treatment, such as disease biology or clinical status at the time of presentation (Pui et al. 2003). In our view, health outcome is the more important measure, and health care is important only as it contributes to outcome.

As in the rest of society, health care in the United States has a history of racial discrimination and segregation. Of great potential concern is the possibility that racial disparities in health care reflect continued patterns of racial discrimination by physicians and other health care providers, and that this continued racial discrimination may be perpetuated by our system of medical education. Fortunately, there is little evidence for overt or conscious racial discrimination by physicians. The ethic of physicians and of medicine is to provide equal and optimal care to all patients, and most physicians strive to conform to this ethic. Current efforts to improve the “cultural competency” of physicians are unlikely to reduce racial disparities in health. To the extent that these programs are based on the premise that physician behavior is the cause of racial disparities, and that changes in physician behavior will reduce these disparities, these efforts seem to be motivated more by “political correctness” than by reasoned analysis, and strike us as misguided.

### SOCIOECONOMIC STATUS

Socioeconomic status is a major determinant of health care and of health outcomes (Siegler and Epstein 2003). Not surprisingly, then, socioeconomic disparities are a major cause of the racial disparities in health care and health outcomes. The Institute of Medicine report concluded that racial and ethnic disparities in health care “are associated with socioeconomic differences and tend to diminish significantly, and in a few cases, disappear altogether, when socioeconomic factors are controlled. The majority of studies, however, find that racial and ethnic disparities remain even after adjustment for socioeconomic differences and other healthcare access-related factors” (Smedley, Stith, and Nelson 2003). While we accept this conclusion, we note that the ways in which socioeconomic status affects health are extraordinarily complex, and include such factors as access to health insurance and to information about healthy behaviors, geography, and a sense of personal autonomy and control over one’s life; it is difficult to control adequately for all of the manifold mechanisms by which socioeconomic status can affect health and health care. Moreover, estimation of socioeconomic (and racial) disparities in health is affected by the choice of reference population used to calculate age-adjusted morbidity and mortality rates (Krieger and Williams 2001).

We do not mean to minimize the role of other factors that may contribute to racial disparities in health. Nonetheless, it strikes us as hypocritical to express concern over the issue of racial disparities without acknowledging or addressing the underlying socioeconomic causes of these disparities. Blacks are disproportionately represented in lower socioeconomic groups, they have less access to health insurance, they live in more unhealthy neighborhoods and communities, and they have a higher incidence of unhealthy behaviors, such as drug abuse and unsafe sexual practices, than do whites. Removal of the barriers that prevent blacks from achieving socioeconomic parity with whites is a daunting task. Nonetheless, we must recognize the overriding role of socioeconomic status as a determinant of health care and of health outcomes; racial disparities in health are likely to persist as long as there are racial differences in socioeconomic status. Of course, while a reduction in the socioeconomic disparities between blacks and whites would go a long way toward reducing racial disparities in health, it would not by itself eliminate health disparities associated with socioeconomic disparities per se (Wilkinson 1997).

Health insurance is one of the most important determinants of health care. People who have health insurance are more likely to get health care and to access the health care system earlier in the course of disease. One recent study reported that, for patients with colorectal, lung, and breast cancer, the relative risk of death within three years was greater for uninsured patients than for those with private insurance; the increased risk ranged from 19% to 44%, even after controlling for age, stage at diagnosis, and length of follow-up (McDavid et al. 2003). Health insurance, or the lack thereof, is closely correlated with socioeconomic status,

making it one of the key factors that contribute to the socioeconomic—and racial—disparities in health care.

### GEOGRAPHY

Geographical factors—both national and local—are gaining increased recognition as important determinants of health. In their analysis of Medicare claims data, Baicker, Chandra, and Skinner (2005) have shown that national disparities in health care reflect regional variation in quality of care, and that there is a disproportionate representation of blacks in areas where everyone receives relatively low quality health. Earlier analyses of similar data have emphasized that *good* care does not necessarily entail *more* care. Neither rates of Medicare spending nor frequencies of medical interventions necessarily correlate with better health outcomes (Wennberg, Fisher, and Skinner 2002).

At a local level, blacks are also over-represented in impoverished communities that frequently have reduced access to health care. Community-based health programs have had some success in providing health care and improving health to these communities (O’Toole et al. 2003). These programs have played an important role in providing social support and information about healthy behaviors (Horowitz, Williams, and Bickell 2003; van Olphen et al. 2003), often by using established local institutions, such as churches, to reach community members.

When thinking about disparities in health care, and about interventions that might ameliorate them, it is important to consider the different ways in which geographical factors contribute to health disparities. Even though physicians can do little to eliminate socioeconomic disparities, they can still make positive changes in health care in their communities.

### LIFE HISTORY

David Barker (1998) has provided strong epidemiological evidence that early environmental experience may predispose fetuses and infants to developing chronic disease. Specifically, low birth weight predisposes people to coronary heart disease, stroke, hypertension, and non-insulin dependent diabetes in later life. In his paper in this volume, Robert Fogel (2005) provides additional support for the “Barker hypothesis.” This hypothesis is biologically fascinating and may yield important insights into normal development as well as the pathogenesis of chronic disease; to the extent that it is true, however, it raises vexing social and policy problems. If, for example, the prevalence of chronic diseases in the adult black population reflects the socioeconomic conditions that prevailed at the time these people were conceived, and the nutritional and health status of their mothers, interventions to prevent these diseases may have limited immediate effect. It may take decades—or generations—before interventions designed to improve

the nutrition and medical care of young women lead to improvements in the health of their adult offspring.

### **RACIAL CLASSIFICATIONS**

The use of racial classifications is itself a contentious issue in medicine as in the rest of our society. A recent debate in the *New England Journal of Medicine* highlights this controversy (Cooper, Kaufman, and Ward 2003; Sheppard and Risch 2003). Historically, the reproductive isolation of geographically separate human populations has led to genetic differences—that is, differences in allele frequencies—between these populations. The genetic differences between populations that are indigenous to different continents are especially marked. These genetic differences may be reflected in differences in disease susceptibility or in drug metabolism. Sheppard and Risch (2003) argue that racial (or geographic) classification of patients as of African, Asian, or European descent provides valuable information about the risk of disease and the response to treatment, and so should be used to inform both epidemiological and clinical studies.

On the other hand, while the genetic differences between populations may provide important information about the history of these populations, they are not directly applicable to individuals; they do not provide criteria for assignment of individuals into distinct racial groups. The African American population is, as its name implies, descended from a mixture of African and American (or European) ancestry. Moreover, given the history of racial segregation and discrimination in the United States, racial groups have lived in socially distinct environments. Thus, racial classifications reflect social and socioeconomic differences as well as genetic differences. Cooper, Kaufman, and Ward (2003) argue that racial classification does not provide useful information about patients and should be abandoned. We tend to agree with these authors. As Lewontin (1972) and others have noted, most of the genetic diversity in the human population is within racial groups, not between them. To the extent that there are genetic determinants of disease susceptibility or drug response, individual patients should be screened for the relevant alleles; their genetic status should not be inferred from their racial or ethnic identification. If physicians or other health care providers choose to ask patients about their identification with one or another racial group, they should remember that group membership is defined by social criteria and provides little information about a person's genetic makeup. Neither science nor common sense provides support for the claim that racial disparities in the burden of disease reflect genetic differences between populations.

### **OTHER DISPARITIES**

Public attention and this conference have focused on racial disparities, and especially on black/white disparities, in health care and health outcomes. Other dis-

crepancies in health are also worthy of attention. We have already discussed socioeconomic disparities in health. Hispanics, Native Americans, and some Asian minority groups also have poorer health care and health outcomes than do non-Hispanic whites. Geographic, linguistic, and cultural barriers to health care—in addition, of course, to socioeconomic disparities—appear to play important roles in the poor health status of these other minority populations. Finally, there are gender disparities in health care. White women, like members of minority groups, are less likely than white men to receive coronary artery bypass grafts for treatment of acute myocardial infarction or kidney transplants for treatment of end-stage renal disease (Harrold et al. 2003; Kayler et al. 2002). Women's longer life expectancy should not blind us to these gender differences in health care; policy responses that are aimed at reducing disparities should be broadly directed at all of these disparities.

#### POSSIBLE RESPONSES, IF NOT SOLUTIONS

What, if anything, is to be done? Of course, the medical profession must monitor its own behavior and practice, to be sure that individual physicians and institutions do not treat their patients in ways that might perpetuate the disparities in health care and health outcomes. But, as noted above, there is little evidence that physicians are the problem. Medicine is embedded in our larger society, and many aspects of health care are beyond the power of individual physicians to affect. Some would argue that a single-payer insurance system, with universal health insurance, would ameliorate the problem of disparities in health care. Health insurance may indeed enable people to access the health care system earlier in the course of their illnesses, and so may result in better health. By itself, however, universal health insurance is unlikely to be the panacea its advocates hope for. Medicare has provided almost universal health care coverage for people over 65, and whatever benefits Medicare may have provided, it has not eliminated the disparities in health care or health outcomes for this population (Wennberg, Fisher, and Skinner 2002). Likewise, National Health Insurance has not eliminated socioeconomic disparities in health in the United Kingdom (Marmot et al. 1978).

Sehgal (2003) has suggested that improvements in the quality of care may lead to a reduction in racial and gender disparities in health care. It is too soon to know whether such efforts can be extended to other disciplines and other treatments, and if reductions in disparities in health care will translate to reductions in disparities in health outcomes. Nonetheless, attention on improving quality of care for all patients remains an attractive approach to reducing disparities. Medicine takes a pragmatic view of cause: cause is defined by the possibility of successful intervention (Rees 2002). Racial disparities in health care and health outcomes are “complex,” “multi-factorial” social problems, caused by factors that extend beyond medicine and are not amenable to medical intervention. While

physicians and other health care providers may not be able to intervene directly, by focusing on quality of care as a cause of disparities in health, they can direct their efforts to improving quality of care for all their patients, with the expectation—or hope—that improved medical care will not only improve health for all Americans, but will decrease if not eliminate the health disparities that are so troubling today.

## REFERENCES

- Anderson, L. B. 2003. Racial gap seen for prescriptions. *Wall Street J*, July 24.
- Associated Press (AP). 2003. Study finds racial gap in heart disease. *Chicago Tribune*, Aug. 26.
- Baicker, K., A. Chandra, and J. S. Skinner. 2005. Geographical variation in health care and the problem of measuring racial disparities. *Perspect Biol Med* 48(Suppl):S42–S53.
- Barker, D. J. P. 1998. *Mothers, babies and disease in later life*. Edinburgh: Churchill Livingstone.
- Centers for Disease Control (CDC). 2003. Summary measures of population health: Report of findings on methodological and data issues. <http://www.cdc.gov/nchs/hphome.htm> (accessed Feb. 22, 2004).
- Centers for Disease Control (CDC). 2004. Deaths: Preliminary data for 2002. *National Vital Statistics Reports* 52(13). <http://www.cdc.gov/nchs/products/pubs/pubd/nvsr/nvsr.htm> (accessed Feb. 22, 2004).
- Cooper, R. S., J. S. Kaufman, and R. Ward. 2003. Race and genomics. *N Engl J Med* 348(12):1166–70.
- Firestone, D. 2003. Frist points to racial inequalities in health care. *NY Times*, Jan. 8, A23.
- Fogel, R. W. 2005. Changes in the disparities in chronic diseases during the course of the twentieth century. *Perspect Biol Med* 48(Suppl):S150–S165.
- Harrold, L. R., et al. 2003. Narrowing gender differences in procedure use for acute myocardial infarction. *J Gen Intern Med* 18:423–31.
- Healthy People 2010. <http://www.healthypeople.gov/> (accessed Feb. 23, 2004).
- Horowitz, C. R., L. Williams, and N. A. Bickell. 2003. A community-centered approach to diabetes in East Harlem. *J Gen Intern Med* 18:542–48.
- Kadan-Lottick, N. S., et al. 2003. Survival variability by race and ethnicity in childhood acute lymphoblastic leukemia. *JAMA* 290(15):2008–14.
- Kayler, L. K., et al. 2002. Gender imbalance in living donor renal transplantation. *Transplantation* 73(2):248–52.
- Krieger, N., and D. R. Williams. 2001. Changing to the 2000 standard million: Are declining racial/ethnic and socioeconomic inequalities in health real progress or statistical illusion? *Am J Public Health* 91:1209–13.
- Lewontin, R. C. 1972. The apportionment of human diversity. *Evol Biol* 6:381–98.
- Liu, L., et al. 2003. Childhood cancer patients' access to cooperative group cancer programs. *Cancer* 97:1339–45.
- Marmot, M. G., et al. 1978. Employment grade and coronary heart disease in British civil servants. *J Epidemiol Community Health* 32:244–49.
- McDavid, K., et al. 2003. Cancer survival in Kentucky and health insurance coverage. *Arch Int Med* 163: 2135–44.



- McNeil, D. G. 2003. Study finds racial differences in use of feeding tubes. *NY Times*, July 2.
- O'Toole, T. P., et al. 2003. Community-based participatory research: Opportunities, challenges, and the need for a common language. *J Gen Intern Med* 18(7):592-94.
- Pui, C., et al. 2003. Results of therapy for acute lymphoblastic leukemia in black and white children. *JAMA* 290(15):2001-7.
- Rees, J. 2002. Complex disease and the new clinical sciences. *Science* 296:698-700.
- Reuters. 2003. Risk of fatal stroke is greatest for blacks, government says. *NY Times*, Feb. 21.
- Sehgal, A.R. 2003. Impact of quality improvement efforts on race and sex disparities in hemodialysis. *JAMA* 289(8):996-1000.
- Sheppard, D., and N. Risch. 2003. The importance of race and ethnic background in biomedical research and clinical practice. *N Engl J Med* 348(12):1170-75.
- Siegler, M., and R. A. Epstein, eds. 2003. Social determinants of health and disease. *Perspect Biol Med* 46(Suppl):S1-S213.
- Smedley, B. D., A.Y. Stith, and A. R. Nelson, eds. 2003. *Unequal treatment: Confronting racial and ethnic disparities in health care*. Washington, DC: National Academies Press.
- van Olphen, J., et al. 2003. Religious involvement, social support, and health among African-American women on the East Side of Detroit. *J Gen Intern Med* 18:549-57.
- Wennberg, J. E., E. S. Fisher, and J. S. Skinner. 2002. Geography and the debate over Medicare reform. *Health Aff* web exclusive:w96-w114. <http://content.healthaffairs.org/cgi/reprint/hlthaff.w2.96v1> (accessed Sept. 27, 2004).
- Wilkinson, R. G. 1997. *Unhealthy societies*. London: Routledge.