SOUNDING BOARD

Class — The Ignored Determinant of the Nation's Health

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The health of the American public has never been better. Infectious diseases that caused terror in families less than 100 years ago are now largely under control. With the important exception of AIDS and occasional outbreaks of new diseases such as the severe acute respiratory syndrome (SARS) or of old ones such as tuberculosis, infectious diseases no longer constitute much of a public health threat. Mortality rates from heart disease and stroke — two of the nation's three major killers — have plummeted. It is no wonder that a 2003 Institute of Medicine report concluded that Americans today, as compared with those in 1900, "are healthier, live longer, and enjoy lives that are less likely to be marked by injuries, ill health, or premature death."[1]

Any celebration of these victories must be tempered by the realization that these gains are not shared fairly by all members of our society. People in upper classes — those who have a good education, hold high-paying jobs, and live in comfortable neighborhoods — live longer and healthier lives than do people in lower classes, many of whom are black or members of ethnic minorities. And the gap is widening.

CLASS, RACE, AND HEALTH

A great deal of attention is being given to racial and ethnic disparities in health care.[2-5] At the same time, the wide differences in health between the haves and the have-nots are largely ignored. Race and class are both independently associated with health status, although it is often difficult to disentangle the individual effects of the two factors.[6] We contend that increased attention should be given to the reality of class and its effect on the nation's health. Clearly, to bring about a fair and just society, every effort should be made to eliminate prejudice, racism, and discrimination. In terms of health, however, differences in rates of premature death, illness, and disability are closely tied to socioeconomic status. Concentrating mainly on race as a way of eliminating these problems downplays the importance of socioeconomic status on health.

The focus on reducing racial inequality is understandable since this disparity, the result of a long history of racism and discrimination, is patently unfair. Because of the nation's history and heritage, Americans are acutely conscious of race. In contrast, class disparities draw little attention, perhaps because they are seen as an inevitable consequence of market forces or the fact that life is unfair. As a nation, we are uncomfortable with the concept of class. Americans like to believe that they live in a society with such potential for upward mobility that every citizen's socioeconomic status is fluid. The concept of class smacks of Marxism and economic warfare. Moreover, class is difficult to define. There are many ways of measuring it, the most widely accepted being in terms of income, wealth, education, and employment.

Although there are far fewer data on class than on race, what data exist show a consistent inverse and stepwise relationship between class and premature death.[7-9] On the whole, people in lower classes die earlier than do people at higher socioeconomic levels, a pattern that holds true in a progressive fashion from the poorest to the richest. This stepwise pattern is illustrated in Figure 1, which shows that, at the extremes, people who were earning $15,000 or less per year from 1972 to 1989 (in 1993 dollars) were three times as likely to die prematurely as were people earning more than $70,000 per year.[10] The same pattern exists whether one looks at education or occupation.[11] With few exceptions, health status is also associated with class.[12]

The difference in mortality and morbidity rates is partly attributable to the fact that people in upper classes have healthier behavior and lifestyles than do people in lower classes. In Great Britain, where good data on class are available, the percentage of smokers in the upper class dropped from 42 percent in 1973 to 17 percent in 1996, even as the rate of smoking rose from 75 percent to 80 percent among people in the lowest class.[13] In the United States, people without a high-school diploma, as compared with college graduates, are three times

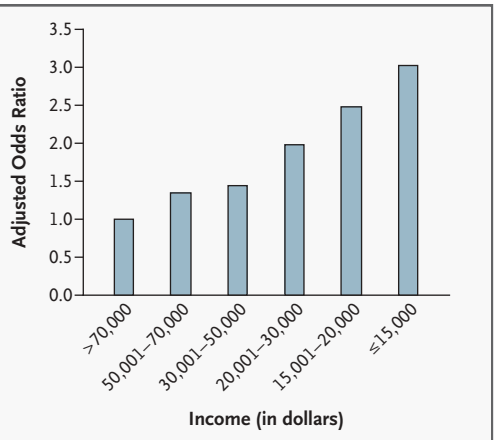

Figure 1. Adjusted Odds Ratio for Death from All Causes According to Annual Household Income, 1972–1989.

Data are from McDonough et al.[10] The group with an annual household income of more than $70,000 (in 1993 dollars) is the reference group.

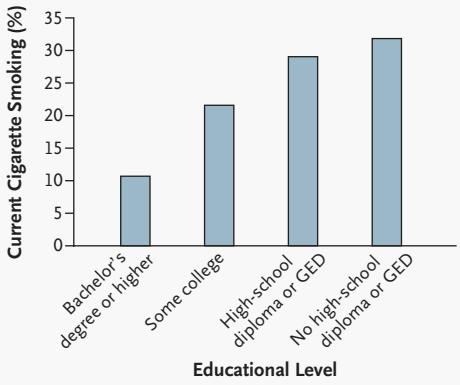

Figure 2. Age-Adjusted Prevalence of Current Cigarette Smoking in 2000 among Persons 25 Years of Age and Older, According to Educational Level.

Data are from the National Center for Health Statistics.[14] GED denotes general equivalency diploma.

as likely to smoke (Fig. 2)[14] and are nearly three times as likely not to engage in leisure-time physical exercise.[15] Partly as a result of a sedentary lifestyle and unhealthy eating habits (often as a result of conditions in which wholesome food is unavailable or exorbitantly priced, public recreation is nonexistent, and exercising outdoors is dangerous), obesity and the diseases it fosters now characterize lower-class life.

But unhealthy behavior and lifestyles alone do not explain the poor health of those in lower classes. Even when behavior is held as constant as possible, people of lower socioeconomic status are more likely to die prematurely than are people of higher socioeconomic status. In a study of white American men (which therefore eliminated the variable of race), when smoking and other risk factors were taken into account, men earning less than $10,000 a year (on the basis of data from the 1980 Census) were 1.5 times as likely to die prematurely as were those earning $34,000 or more.[16] Similar results were obtained in Great Britain, where the Whitehall study of British civil servants showed that when smoking and other risk factors were controlled for, those in the lowest employment category were still more than twice as likely to die prematurely of cardiovascular disease as were those in the highest category (Fig. 3).[17]

In sum, people in lower classes die younger and are less healthy than people in higher classes. They behave in ways that ultimately damage their health and that take their lives prematurely (by smoking more, having poorer eating habits, and exercising less). They also have less health insurance coverage, live in worse neighborhoods, and are exposed to more environmental hazards. Beyond that, however, there is something about lower socioeconomic status itself that increases the risk of premature death.

Much the same holds true for blacks in the United States. Having lower-class status and being black are intertwined to such a degree that it is difficult to separate the two factors. (We recognize that some other racial and ethnic groups also have poorer health than whites. In this article, however, we focus largely on blacks because of the historical importance of race in the United States and the fact that more data are available on the health of blacks than on the health of other minority groups.) Blacks are disproportionately poorer and less educated, and they are more likely to live in dangerous, unhealthy urban neighborhoods. The median financial net worth of whites, for example, is 10 times that of blacks[18]; 27 percent of black families live in poverty, as compared with 11 percent of white families.[19] The life expectancy of blacks is seven years less than that of whites.[20] Blacks have higher rates of cardiovascular disease, many types of cancer, diabetes, infant mortality, hypertension, homicide, and unintentional injuries than do whites.[21] Are these differences due primarily to race or socioeconomic circumstances?

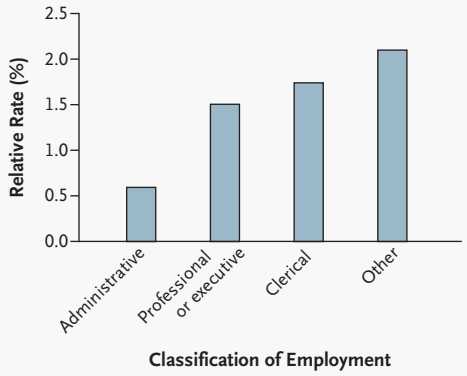

Figure 3. Relative Rates of Death from Cardiovascular Disease among British Civil Servants According to the Classification of Employment.

Data are from Davey Smith et al.[17] The relative rates of death are for people who did not own cars; the rates were adjusted for age, smoking status, systolic blood pressure, plasma cholesterol concentration, and glucose tolerance. In the British civil service, "administrative" positions are at the high end of the socioeconomic scale and those in "other" jobs are at the low end.

Although race and class both have an effect on health, our sense of the evidence is that of the two, class has a more powerful effect. Blacks have higher rates of death from heart attack than do whites at all levels of income, and the poorest people, whatever their race, have substantially higher rates of heart attack than those who are better off. As Table 1 illustrates, the difference in the rates of premature death from heart attack between poorer and richer people is far greater than the difference in the rates of premature death between blacks and whites.[22]

A comprehensive review of the available evidence led Williams and Collins to conclude, "Socioeconomic differences between racial groups are largely responsible for the observed patterns of racial disparities in health status,"[23] a conclusion shared by Davey Smith and colleagues, who wrote, "Socioeconomic position is the major contributor to differences in death rates between black and white men."[24]

POLICY IMPLICATIONS

Recognizing the importance of class to health does not mean discounting the importance of race. As Williams has observed, "Racism is still a driving force in determining economic opportunities for minorities."[25] It does imply, however, that rather than focusing primarily on reducing racial and ethnic disparities, policymakers should devote the same energy to improving the overall health of the public. Since the best way to do this is to focus on those whose health is the poorest, the targets of intervention will still be poor members of minority groups but will include lower-class whites as well. This refocusing will require a number of distinct policy steps.

COLLECTING BETTER DATA ON CLASS

Far more data regarding mortality and morbidity are available according to race than according to class, and the paucity of socioeconomic data is a problem.[26] Virtually all of the recent articles on disparities come from data sets that include information on race and ethnic group but not on socioeconomic status. This has the unintended result of driving researchers to focus on race and ethnic background rather than on class.

The United States does not systematically collect mortality or morbidity data stratified by social class. There are few national or even regional disease registries, and those that exist do not include socioeconomic data.[27] Of the 58 trend tables on "health status and determinants" that provide data on race or socioeconomic status in *Health, United States, 2003*,[28] only 8 contain information on socioeconomic status (usually, educational level), whereas 57 contain information on race. What data there are on class come primarily from big national surveys, such as the National Health and Nutrition Examination Surveys.

Death certificates have traditionally included information about race but not class. Only in 1989 did states begin to include information about a decedent's educational level; information on a decedent's occupation, in those states that collect it, often is not coded or reported. In contrast, starting in 1911 and throughout the 20th century, British death certificates included the social class of the decedent on the basis of one of five occupational categories ranging from unskilled to professional.[29] Thus, much of what we know about class and health comes from Great Britain, primarily through three major reports and studies. The first, the Black report, concluded that there were marked inequalities in health between the social classes in Britain.[30] In the second, the Whitehall study, Marmot and his colleagues found that mortality rates among British civil servants followed a gradient: mortality rates

Table 1. Average Annual, Age-Adjusted Rates of Death from Heart Disease among Persons 25 to 64 Years Old, 1979–1989.*

Annual Income	Men			Women		
	White	Black	Ratio of Black Men to White Men	White	Black	Ratio of Black Women to White Women
	no. of deaths/100,000 person-years					
<$10,000	324.1	390.8	1.21	112.2	184.7	1.65
$10,000–$14,999	255.4	292.8	1.15	71.3	119.2	1.67
$15,000–$24,999	136.9	142.2	1.04	43.7	64.8	1.48
Ratio of lowest to highest income	2.4	2.7	—	2.6	2.9	—

* Data on income ranges (in 1980 dollars) and ratios of black men to white men and black women to white women are from Williams.[22]

among persons in every occupational class (even white-collar workers) were higher than those in the class above, and no clear threshold (such as a poverty level) divided persons in good health from those in poor health.[31,32] The third, the 1998 Acheson report, showed that although death rates had fallen among all social groups between 1970 and 1990, the decline was substantially greater in the higher social classes, and the mortality gap was thus growing.[33] The Acheson report proposed 39 policy steps in areas such as taxes, education, employment, housing, nutrition, and agriculture that were aimed at improving health (particularly, but not exclusively, that of the poor) and adoption of a health impact statement, much like our own environmental impact statement.[34]

UNDERSTANDING HOW CLASS INFLUENCES HEALTH

Although there is wide agreement that people of higher socioeconomic status live longer and healthier lives than people of lower socioeconomic status, there is less consensus on why this is so or which factors are most responsible. Some researchers suggest that education is the critical variable.[35] In this country, education is considered the key to economic and social advancement, since better-educated people are more likely to get better jobs and to have higher social status. Schools instill values (including behavioral ones) in young people and give them knowledge to read about and understand health information and the capacity to solve problems. As Deaton noted, "It is time that the educational debate was more cognizant of [education's] health benefits."[36]

Others pinpoint income as the single most powerful predictor of mortality.[37] Low income can affect health through a number of mechanisms. The poorer a person is, the more likely it is that he or she will have to struggle to meet the basic necessities of life (such as obtaining food, shelter, and medicine, when necessary), to live in a dangerous neighborhood, and to endure the hardships of everyday living. As income increases, people are able to afford more of the things that lead to good health and to obtain better medical care.

There is a related school of thought that argues that inequitable distribution of income and wealth itself causes poor health.[38] The argument is based on the comparatively long life expectancy of people living in nations with a more equitable distribution of wealth, such as Sweden and Japan, and, domestically, in states with a more equitable distribution of income.[39,40] Wealth and income are distributed less equitably in the United States than in any other industrialized country, and the gap between the rich and the poor is widening. (The average annual compensation of the top 100 chief executive officers went from 39 times that of the average worker in 1970 to more than 1000 times in 1999.[41]) Insofar as health reflects the distribution of wealth in a society, these are disturbing indicators. The explanation of poor health on the basis of inequality, however, has many critics, who argue that an absolute lack of resources, or poverty, is more important than a relative lack of resources.[42,43]

Some analysts suggest that employment is the key socioeconomic determinant of health.[44] Workers such as physicians, attorneys, and senior corporate executives are highly educated, and their employment brings them both high income and prestige. Lower-status jobs, on the other hand, can expose workers to an unhealthy environment and boring, repetitive tasks. Workers in these jobs often

have little job security or control over their work, which, in turn, leads to increased stress levels and to a greater chance of illness. Of course, unemployment is in itself stressful.

Recently, researchers have studied the hypothesis that where people live has an independent influence on health.[45] The argument is that poor neighborhoods — which are often dangerous and have high crime rates, with substandard housing, few or no decent medical services nearby, low-quality schools, little recreation, and almost no stores selling wholesome food — offer residents, no matter what their race, income, or education, little chance to improve their lives and engage in health-promoting behaviors.[46]

Whatever the most important elements of class may be, there must be mechanisms whereby being in a lower class translates into poor health. Recent research suggests that stress is one such mechanism. Studies have linked poor health to the constant stress of a lower-class existence — a lack of control over one's life circumstances, increased social isolation, and the anxiety brought about by a subjective feeling of being of low social status (all of which can be compounded by racism). Physiologically, stress appears to trigger a neuroendocrinologic response that is beneficial in the short term but over the long run can weaken the body's resistance to illness.[47]

ADVANCING SOCIAL AND ECONOMIC POLICIES THAT WILL IMPROVE HEALTH

Although there is still much to learn about the relative contributions of education, income, and occupation to health, the fact that they do have an influence means that policies affecting these areas must be examined for their effects on health. This requires broadening the concept of health policy to include areas not normally considered when thinking about health. Investments in social and economic policy made upstream can pay health dividends downstream. Policies regarding education, taxes, recreation, transportation, and housing cannot be divorced from their effects on health. Tax policies that benefit people at the top while having little effect on those on the bottom, for example, should be recognized as detrimental to the aggregate public health, since revenues that otherwise could be used for the social good are forgone. Policies that shutter inner-city recreation facilities affect the health of the residents of those neighborhoods. Failure to fund inner-city schools adequately not only hinders the education of the most vulnerable children but also damages their health. On the basis of what is known about early-childhood development, improving preschool and elementary education may well be the most beneficial investment to improve health.

CONCLUSIONS

Health reform, to date, has focused primarily on health insurance. Although finding a way to expand health insurance coverage for Americans must remain a high priority,[48] medical care has been estimated to account for only about 10 to 15 percent of the nation's premature deaths.[49] Thus, ensuring adequate medical care for all will have only a limited effect on the nation's health. More important is enabling people in the lower economic classes to adopt more healthy forms of behavior and attending to those social and environmental factors that encourage healthy behavior — abstaining from smoking, drinking alcohol in moderation and not before driving a car, eating wisely, engaging in regular physical activity, adopting prudent sexual practices, and reducing exposure to environmental hazards. However, a nation that is serious about improving the health of its people will have to go beyond expanding medical care, changing unhealthy behavior, and improving the environment and give more attention to social policies that address the class — as well as the racial and ethnic — differences that underlie illness and premature death.

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