THE HEALTH OF BLACK FOLK: DISEASE, CLASS, AND IDEOLOGY IN SCIENCE

by NANCY KRIEGER and MARY BASSETT

Since the first crude tabulations of vital statistics in colonial America, one stark fact has stood out: black Americans are sicker and die younger than whites. As the epidemic infectious diseases of the nineteenth century were vanquished, the black burden of ill health shifted to the modern killers: heart disease, stroke, and cancer. Today black men under age 45 are ten times more likely to die from the effects of high blood pressure than white men. Black women suffer twice as many heart attacks as white women. A variety of common cancers are more frequent among blacks—and of cancer victims, blacks succumb sooner after diagnosis than whites. Black infant mortality is twice that of whites. All told, if the mortality rates for blacks and other minorities today were the same in the United States as for whites, more than 60,000 deaths in minority communities could be avoided each year.

What is it about being black that causes such miserable odds? One answer is the patently racist view that blacks are inherently more susceptible to disease—the genetic model. In contrast, environmental models depict blacks as victims of factors ranging from poor nutrition and germs to lack of education and crowded housing. Initially formulated as an alternative to the genetic model by liberals and much of the left, the environmental view has now gained new support from the right and becomes a major prop for Reagan administration health policies: instead of blaming the victims' genes, these conservatives

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blame black lifestyle choices as the source of the racial gap in health.

We will argue that these analytic models are seriously flawed, in essence as well as application. They are not the product of a racist use of allegedly "neutral" science, but reflect the ways in which ideology and politics penetrate scientific theory and research. Typically, they deny or obscure that the primary source of black/white health disparities is the social production of disease under conditions of capitalism and racial oppression. The "facts of being black" are not, as these models suggest, a genetically determined shade of skin color, or individual deprived living conditions, or ill-informed lifestyle choices. The facts of being black derive from the joint social relations of race and class: racism disproportionately concentrates blacks into the lower strata of the working class and further causes blacks in all class strata to be racially oppressed. It is the left's challenge to incorporate this political reality into how we approach racial differences in health.

The Genetic Model

Despite overwhelming evidence to the contrary, the theory that "race" is primarily a biological category and that black-white differences in health are genetically determined continues to exert profound influence on both medical thinking and popular ideology. For example, an editorial on racial differences in birth weight (an important determinant of infant mortality) in the January 1986 *Journal of the American Medical Association* concluded: "Finally, what are the biologic or genetic differences among racial or ethnic groups? Should we shrink from the possibility of a biologic/genetic influence?" Similarly, a 1983 handbook prepared by the International Epidemiologic Association defined "race" as "persons who are relatively homogeneous with respect to biological inheritance." Public health texts continue to enshrine "race" in the demographic triad of "age, race, and sex," implying that "race" is as biologically fundamental a predictor of health as aging or sex, while the medical literature remains replete with studies that examine racial differences in health without regard to class.

The genetic model rests on three basic assumptions, all of which are flawed: that "race" is a valid biological category; that the genes which determine "race" are linked to the genes which affect health; and that the health of any community is mainly the consequence of the genetic constitution of the individuals of which it is composed. In contrast, we will argue that the health of the black community is not simply the sum of the health of individuals who are "genetically black" but instead chiefly reflects the social forces which create racially oppressed communities in the first place.

It is of course true that skin color, hair texture, and other visible features used to identify "race" are genetically encoded—there *is* a biologic aspect to "race." The importance of these particular physical traits in the spectrum of human variation, however, has been determined historically and politically. People also differ in terms of stature and eye color, but these attributes are rarely accorded significance. Categories based primarily on skin color correlate with health because race is a powerful determinant of the location and life-destinies of individuals within the class structure of U.S. society. Ever since plantation owners realized that differences in skin color could serve as a readily identifiable and permanent marker for socially determined divisions of labor (black runaway slaves were easier to identify than escaped white indentured servants and convicts, the initial workforce of colonial America), race and class have been inextricably intertwined. "Race" is not a neutral descriptive category, but a social category born of the antagonistic relation of white supremacy and black oppression. The basis of the relative health advantage of whites is not to be found in their genes but in the relative material advantage whites enjoy as a consequence of political perogative and state power. As Richard Lewontin has pointed out, "If, after a great cataclysm, only Africans were left alive, the human species would have retained 93 percent of its total genetic variation, although the species as a whole would be darker skinned." The fact that we all know which race we belong to says more about our society than about our biology.

Nevertheless, the paradigm of a genetic basis for black ill health remains strong. In its defense, researchers repeatedly trot out the few diseases for which a clear-cut link of race is estab-

lished: sickle cell anemia, G&PD deficiency, and lactose intolerance. These diseases, however, have a tiny impact on the health of the black population as a whole—if anything, even less than those few diseases linked to "whiteness," such as some forms of skin cancer. Richard Cooper has shown that of the tens of thousands of excess black deaths in 1977, only 277 (0.3 percent) could be attributed to diseases such as sickle cell anemia. Such uncommon genetic maladies have become important strictly because of their metaphorical value: they are used to support genetic explanations of racial differences in the "big diseases" of the twentieth century—heart disease, stroke, and cancer. Yet no current evidence exists to justify such an extrapolation.

Determined nonetheless to demonstrate the genetic basis of racial health differences, investigators today—like their peers in the past—use the latest techniques. Where once physicians compared cranial capacity to explain black/white inequalities, now they scrutinize surface markers of cells. The case of hypertension is particularly illustrative. High blood pressure is an important cause of strokes and heart attacks, contributing to about 30 percent of all deaths in the United States. At present, the black rate of hypertension in the United States is about twice that of whites. Of over five hundred recent medical journal articles on the topic, fewer than a dozen studies explored social factors. The rest instead unsuccessfully sought biochemical/genetic explanations—and of these, virtually none even attempted to "define" genetically who was "white" and who was "black," despite the alleged genetic nature of their enquiry. As a consequence of the wrong questions being asked, the causes of hypertension remain unknown. Nonetheless, numerous clues point to social factors. Hypertension does not exist in several undisrupted hunter/gatherer tribes of different "races" but rapidly emerges in these tribes after contact with industrial society; in the United States, lower social class begets higher blood pressure.

Turning to cancer, the authors of a recent major government report surmised that blacks have poorer survival rates than whites because they do not "exhibit the same immunologic reactions to cancerous processes." It is noteworthy, however, that the comparably poor survival rates of British breast cancer patients have never elicited such speculation. In our own work on breast

cancer in Washington state, we found that the striking "racial" difference in survival evaporated when we took class into account: working-class women, whether black or white, die sooner than women of higher social class standing.

To account for the persistence of the genetic model, we must look to its political significance rather than its scientific content. First used to buttress biblical arguments for slavery in a period when science was beginning to replace religion as sanction for the status quo, the genetic model of racial differences in health emerged toward the end of the eighteenth century, long before any precise theory of heredity existed. In well-respected medical journals, doctors debated whether blacks and whites were even the same species (let alone race), and proclaimd that blacks were intrinsically suited to slavery, thrived in hot climates, succumbed less to the epidemic fevers which ravaged the South, and suffered extraordinary rates of insanity if allowed to live free. After the Civil War effectively settled the argument about whether blacks belonged to the human species, physicians and scientists began elaborating hereditarian theories to explain the disparate health profiles not only of blacks and whites, but of the different white "races"—as defined by national origin and immigrant status. Virtually every scourge, from TB to rickets, was postulated to be inherited. Rheumatic fever, now known to be due to strep bacteria combined with the poverty which permits its expression in immunocompromised malnourished people, was long believed to be linked with the red hair and pale complexions of its Irish working-class victims. Overall, genetic explanations of differences in disease rates have politically served to justify existing class relations and excuse socially created afflictions as a result of immutable biology.

Nowadays the genetic model—newly dressed in the language of molecular genetics—continues to divert attention from the class origin of disease. Genetic explanations absolve the state of responsibility for the health profile of black America by declaring racial disparities (regrettably) inevitable and normal. Intervention efforts based on this model founder for obvious reasons: short of recombinant DNA therapies, genetic screening and selective reproduction stand as supposed tools to reduce the racial gap in health.

Unfortunately, the genetic model wields influence even within the progressive health movement, as illustrated by the surge of interest in sickle cell anemia in the early 1970s. For decades after its initial description in 1925, sickle cell anemia was relegated to clinical obscurity. It occurs as often in blacks as does cystic fibrosis in whites. By linking genetic uniqueness to racial pride, such groups as the Black Panther Party championed sickle cell anemia as the number one health issue among blacks, despite the fact that other health problems—such as infant mortality—took a much greater toll. Because the sickle cell gene provides some protection against malaria, sickle cell seemed to link blacks to their African past, now three centuries removed. It raised the issue of racist neglect of black health in a setting where the victims were truly blameless: the fault lay in their genes. From the point of view of the federal government, sickle cell anemia was a uniquely black disease which did not raise the troubling issues of the ongoing oppression of the black population. In a period of political turmoil, what more could the government ask for? Small wonder that President Nixon jumped on the bandwagon and called for a national crusade.

The Environmental Model

The genetic model's long history and foundations in the joint race and class divisions of our society assure its continued prominence in discussions on the racial gap in health. To rebut this model, many liberals and progressives have relied upon environmental models of disease causation—only to encounter the right on this turf as well.

Whereas the rise of slavery called forth genetic models of diseases, environmental models were born of the antagonistic social relations of industrial capitalism. In the appalling filth of nineteenth-century cities, tuberculosis, typhus, and infant diarrhea were endemic in the newly forming working class; periodically, epidemics of yellow fever and cholera would attack the entire populace. A sanitary reform movement arose, advocating cleaner cities (with sewer systems and pure water) to protect the wellbeing of the wealthy as well as the poor, and also to engender a healthier, more productive workforce.

In the United States, most of the reformers were highly moralistic and staunchly procapitalist, seeing poverty and squalor as consequences of individual intemperance and ignorance rather than as necessary correlates of capital accumulation. In Europe, where the working-class movement was stronger, a class-conscious wing of the sanitary reform movement emerged. Radicals such as Frederick Engels and Rudolph Virchow (later the founder of modern pathology) argued that poverty and ill health could only be eliminated by resolving the antagonistic class relations of capitalism.

The early sanitary reform movement in the United States rarely addressed the question of racial differences in health per se. In fact, environmental models to explain black/white disparities emerged only during the mid-twentieth century, a consequence of the urban migration of blacks from the rural South to the industrial North and the rise of the civil-rights movement.

Today's liberal version of the environmental model blames poverty for black ill health. The noxious features of the "poverty environment" are catalogued and decried—lead paint from tenement walls, toxins from work, even social features like discrimination. But as in most liberal analyses, the unifying cause of this litany of woes remains unstated. We are left with an apparently unconnected laundry list of problems and no explanation of why blacks as a group encounter similar sickening conditions.

The liberal view fetishizes the environment: individuals are harmed by inanimate objects, physical forces, or unfortunate social conditions (like poverty)—by *things* rather than by people. That these objects or social circumstances are the *creations* of society is hidden by the veil of "natural science." Consequently, the "environment" is viewed as a natural and neutral category, defined as all that is external to individuals. What is not seen is the ways in which the underlying structure of racial oppression and class exploitation—which are relationships among people, not between people and things—shape the "environments" of the groups created by these relations.

The debilitating disease pellagra serves as a concrete example. Once a major health problem of poor southern farm and mill laborers in the United States, pellagra was believed to be a genetic disease. By the early 1920s, however, Joseph Goldberger

had proved that the disease stemmed from a dietary deficiency in niacin and had also demonstrated that pellagra's familial nature existed because of the inheritance of nutritional options, not genes. Beyond this, Goldberger argued that pellagra, in essence, was a *social* disease caused by the single cash-crop economy of the South: reliance on cotton ensured seasonal starvation as food ran out between harvests, as well as periodic epidemics when the cotton market collapsed. Southern workers contracted pellagra because they had limited diets—and they had limited diets *because* they were southern workers. Yet governmental response was simply to supplement food with niacin: according to this view, vitamin deficiency—not socially determined malnutrition—was the chief cause of pellagra.

The liberal version of the environmental model also fails to see the causes of disease and the environment in which they exist as a historical product, a nature filtered through, even constructed by, society. What organisms and chemicals people are exposed to is determined by both the social relations and types of production which characterize their society. The same virus may cause pneumonia in blacks and whites alike, just as lead may cause the same physiologic damage—but *why* the death rate for flu and pneumonia and *why* blood lead levels are consistently higher in black as compared to white communities is not addressed. While the liberal conception of the environment can generate an exhaustive *list* of its components, it cannot *comprehend* the all-important assemblage of features of black life. What explains why a greater proportion of black mothers are single, young, malnourished, high-school dropouts, and so on?

Here the right is ready with a "lifestyle" response as a unifying theme: blacks, not racism, are the source of their own health woes. Currently, the Reagan administration is the chief promoter of this view—as made evident by the 1985 publication of the Report of the Secretary's Task Force on Black and Minority Health. Just one weapon among many in the government's vicious ideological war to justify its savage gutting of health and social service programs, the report shifts responsibility for the burden of disease to the minority communities themselves. Promoting "health education" as a panacea, the government hopes

to counsel minorities to eat better, exercise more, smoke and drink less, be less violent, seek health care earlier for symptoms, and in general be better health-care consumers. This "lifestyle" version of the environmental model accordingly is fully compatible with the genetic model (i.e., genetic disadvantage can be exaggerated by lifestyle choices) and echoes its ideological messages that individual shortcomings are at the root of ill health.

In focusing on individual health habits, the task force report ironically echoes the language of many "health radicals," ranging from iconoclasts such as Ivan Illich to counterculture advocates of individually oriented self-help strategies. United in practice, if not in spirit, these apparently disparate camps all take a "holistic" view, arguing that disease comes not just from germs or chemicals but from lifestyle choices about food, exercise, smoking, and stress. Their conflation of lifestyle choices and life circumstance can reach absurd proportions. Editorializing on the task force report, the *New York Times* agreed that: "Disparities may be due to cultural or lifestyle differences. For example, a higher proportion of blacks and hispanics live in cities, with greater exposure to hazards like pollution, poor housing, and crime." But what kind of "lifestyle" causes pollution, and who chooses to live in high-crime neighborhoods? Both the conservative and alternative "lifestyle" versions of the environmental model deliberately ignore or distort the fact that economic coercion and political disenfranchisement, not free choice, locate minority communities in the most hazardous regions of cities. What qualitatively constrains the option of blacks to "live right" is the reality of being black and poor in the United States.

But liberals have had little response when the right points out that even the most oppressed and impoverished people make choices affecting their health: it may be hard to eat right if the neighborhood grocer doesn't sell fresh vegetables, but teenage girls do not have to become pregnant. For liberals, it has been easier to portray blacks as passive, blameless victims and in this way avoid the highly charged issue of health behaviors altogether. The end result is usually just proposals for more health services *for* blacks, bandaids for the gaping wounds of oppression. Yet while adequate health services certainly are

needed, they can do little to stem the social forces which cause disease.

Too often the left has been content merely to trail behind the liberals in campaigns for health services, or to call only for social control of environmental and occupational exposures. The right, however, has shifted the terrain of battle to the issue of individual behavior, and we must respond. It is for the left to point out that society does not consist of abstract individuals, but rather of people whose life options are shaped by their intrinsic membership in groups defined by the social relations of their society. Race and class broadly determine not only the conditions under which blacks and whites live, but also the ways in which they can respond to these conditions and the political power they have to alter them. The material limits produced by oppression create and constrain not only the type of housing you live in, but even the most intimate choices about what you do inside your home. Oppression and exploitation beget the reality and also the belief that bad health and personal failure are ineluctable facts of life.

Frantz Fanon wrote eloquently of the fatalistic hopelessness engendered by oppression in colonial Algeria. Eliminating self-destructive behaviors, like drug addiction or living in a battering relationship, requires that they be acknowledged as the subjective reflection of objective powerlessness. As Bylle Avery, director of the National Black Women's Health Project, has said, wellness and empowerment are linked. School-based birth control clinics, however necessary as part of the strategy to reduce teen pregnancy, will be ineffective as long as the social motivation for young black women to get pregnant remains unaddressed; for black women to improve their health, they must individually choose to act collectively in order to transform the social conditions which frame, constrain, and devalue their lives as black women.

Toward a Marxist Conception

The ideological content of science is transparent in disease models now rejected as archaic or indisputably biased. The feudal view of disease as retribution of God and the eugenist science underlying Nazi racial hygiene clearly resonated well

with the dominant politics and ideology of their respective societies. But it is far more difficult to discern the ideological content of scientific theory in one's own time and place.

Criticism of the ideology underlying existing paradigms is an important tool in undermining reactionary science. It can help us sort out the apparent riddle of the Reagan administration's embrace of "holistic" health. Such criticism also points the way toward alternative conceptions. To construct a new paradigm, however, requires painstaking work. Moreover, the goal is not a "neutral" science, but one which openly acknowledges the ways in which ideology inevitably is incorporated *into* scientific concepts and theories. Accurate elucidation and prevention of the material and ideological components of disease processes necessitates the explicit adoption of an anti-racist and class-conscious standpoint.

We have only a hint of how a Marxist analysis of the social relations of race and class can illuminate the processes involved in the social production of disease. Such an approach has already shown that many "racial" differences in disease are actually attributable to differences in class. Similarly, the finding of some Marxist researchers that an absentee landlord, rather than race, is the best predictor of lead poisoning points to what this new science can offer in the way of prevention.

But these are small, isolated observations. Too often we are constrained by assumptions built into existing techniques and methodologies. The intimidating mathematics of multiple regression which dominate public health research cannot even contemplate an effect which becomes its own cause—such as the way in which malnutrition opens the way for infections, which cause diarrhea, which causes malnutrition. Further, existing analytic techniques cannot address phenomena like class relations or racial oppression which cannot be expressed as numbers. True, we can calculate the health effect of more or less income or education, but these are pale reflections of class relations, outcomes and not essences. Similarly, we are limited by disease definitions geared toward individual etiology. Treating the problems of substance abuse, infectious disease, infant mortality, and occupational exposure in the black community as separate maladies obscures their common social antecedent.

Clearly, we need basically new approaches to understand the dialectical interpenetration of racism, class relations, and health.

To unravel and eliminate black/white differences in disease, we must begin by politically exposing, not merely describing, the social roots of suffering and disease. Throughout U.S. history, the functioning of capitalism has been bound up with the exploitation and racial oppression of blacks, and the racial stratification of the working class has meant that within the context of the ill health of the working class as a whole, that of blacks has been the worst.

To improve black health, progressive health-care activists must not only fight to restore and expand urgently needed health services. We must also expose the class essence of the disease models which the federal government uses to rid itself of responsibility for social intervention to deal with the problem. In order to target the social forces which produce disease, we must begin to develop an anti-racist model of disease causation. Ultimately, to call for an anti-racist science is to demand a class-conscious science. We cannot afford to do with less.

Technology discloses man's mode of dealing with nature, the process of production by which he sustains his life, and thereby also lays bare the mode of formation of his social relations, and of the mental conceptions that flow from them.

—Marx, *Capital,* vol. 1