

Learning to Live With Complexity: Ethnicity, Socioeconomic Position, and Health in Britain and the United States

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ABSTRACT

The relation between ethnicity, socioeconomic position, and health is complex, has changed over time, and differs between countries. In the United States there is a long tradition of treating ethnic group membership simply as a socioeconomic measure, and differentials in health status between African Americans and groups of European origin have been considered purely socioeconomic. A contrary position sees the differences as either "cultural" or due to inherent "racial" differences.

Although conventional socioeconomic indicators statistically explain much of the health difference between African Americans and Americans of European origin, they do not tell the full story. Incommensurate measures of socioeconomic position across ethnic groups clearly contribute to this difference. Additional factors, such as the extent of racism, are also likely to be important.

The interaction of ethnicity, social position, and health in Britain is similarly complex. Studies that inadequately account for socioeconomic circumstances when examining ethnic-group differences in health can reify ethnicity (and its supposed correlates); however, the reductionist attribution of all ethnic differences in health to socioeconomic factors is untenable. The only productive way forward is through studies that recognize the contingency of the relations between socioeconomic position, ethnicity, and particular health outcomes. (*Am J Public Health*. 2000;90:1694-1698)

That health is related to what we now call ethnicity has been noted from the time when quantitative health data were first recorded in Britain. Thus, in 1845, Friedrich Engels noted the poor health and mortality record of the Irish living in England.¹ Engels also drew attention to the miserable social and environmental circumstances in which the majority of the Irish population lived, and he clearly considered these circumstances to underlie their poor health. Similarly, in a 1916 US report, John W. Trask concluded that the lower death rates among Whites than among Blacks reflected more favorable socioeconomic circumstances, rather than any inherent ethnic differences.² The associations between ethnicity, social position, and health were clearly apparent to these authors, but the complexity of these interrelationships has not been fully recognized in much of the research conducted over the past century.

In the United States, ethnicity is often used as a proxy for socioeconomic position, owing, in part, to the relative absence of socioeconomic data in some routine data sources. Although there has been a long tradition of analyzing socioeconomic position and health in the United States,^{3,4} this work went into abeyance, to a degree, after the Second World War. The availability of information on ethnicity in routine data sources has allowed the explicit use of ethnicity as a socioeconomic indicator. Thus, in a Department of Health and Human Services report titled *Health Status of the Disadvantaged*, a high proportion of tables present health indicators by what is referred to as "race" and not by any explicitly socioeconomic measure.⁵

The use of ethnicity in this way is clearly problematic. First, it can lead to the ignoring of socioeconomic differences in health status within minority ethnic populations. Indeed, until relatively recently the association between socioeconomic position and mortality among minority ethnic groups was little examined in the United States.⁶⁻⁸ Second, the use of ethnicity as a proxy for socioeconomic position often makes the inappropriate assumption that all members of minority ethnic groups are economically disadvantaged or deprived, an implied identity that, understandably, many people would want to reject. Third, it assumes that common interests are shared within but not between ethnic groups, whereas the real interests of the working class, for example, may be shared across ethnic groups more than the in-

terests of an ethnic group are shared by the capitalist and working-class members within that group.^{9,10} Finally, this approach has difficulty accounting for cases in which minority ethnic groups who are economically disadvantaged compared with the majority population have better health outcomes—for example, the low mortality of Hispanic adults in the United States^{11,12} and of African Caribbean men in Britain¹³ and the low postneonatal mortality among offspring of women of Bangladeshi or Indian origin in Britain.¹⁴

Recognition of the need to analyze ethnicity and socioeconomic position as separate variables in health studies raises several important issues. First, do conventional socioeconomic measures have the same association with health status within different ethnic groups? Second, to what degree does standardization for conventional socioeconomic indicators account for health differences between ethnic groups? Third, what are the problems with this approach?

Socioeconomic Position and Health Status Within Minority Ethnic Groups

Findings relating socioeconomic position to health status within minority ethnic groups are varied. Within the United States, socioeconomic gradients in all-cause adult mortality appear similar among non-Hispanic Whites, non-Hispanic Blacks, and Hispanics.^{6-8,11} In one study, a formal test of interaction found the socioeconomic gradient in mortality to be greater among Black than among White men, particularly after adjustment for risk factors.⁷ Socioeconomic gradients in infant mortality, uptake of vaccinations, activity limitation in children, teenage childbearing, blood lead levels in childhood and adulthood, homicide, and poor self-ratings of health are similar for males and females within the different groups for whom data are available, generally non-

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This commentary was accepted July 19, 2000.

Hispanic White, non-Hispanic Black, Asian or Pacific Islander, and American Indian or Alaska Native.⁸

For some health outcomes, socioeconomic gradients vary between ethnic groups. Thus the socioeconomic gradient in lung cancer mortality is greater in White than in Black men, while the gradient in noncardiovascular, noncancer mortality is greater in Black than in White men.⁷ In San Francisco, there is a positive socioeconomic gradient (higher risk among the better-off) for breast cancer among Hispanics and Asians or Pacific Islanders but no marked gradient among Whites or Blacks; for lung cancer incidence, there is a positive gradient among Hispanics and an inverse gradient among Whites and Blacks; and for cervical cancer, there are marked inverse gradients among White and Hispanic women and much weaker gradients among Asians or Pacific Islanders and Black women.¹⁵ There are several other health measures for which socioeconomic gradients are different in different ethnic groups, including low birthweight (little gradient among Hispanics and Asians or Pacific Islanders but inverse gradients among Whites and Blacks), adolescent obesity (inverse gradient in Whites and positive gradients among Blacks and Mexicans), and suicide (inverse gradients among Whites and Blacks but a positive gradient among Hispanics).⁸

In British health studies, ethnicity has often been indexed by country of birth because of the availability of this information in the census.^{16,17} This is clearly problematic for, say, people born in Britain but of Caribbean family background (or people of British family background born on the Indian subcontinent). In many studies, the intention to categorize family of origin is evident in the separation of those born in West Africa (most of whom will be of African family origin) from those born in East Africa, who, within Britain, generally have Indian-subcontinent family origins.

The 1991 British census contained a question on ethnic group that proved controversial because of the external imposition of categories, leading many people to opt for the "any other ethnic group" or "Black-other" categories (as opposed to Black-Caribbean or Black-African).¹⁸ The 2001 census is likely to contain more categories than have been used previously—in particular, "mixed" ethnicity categories,¹⁹—and will lead to a marked change in the official description of the ethnic composition of Britain simply by providing more, precoded choices. This demonstrates the way in which methods of data collection construct ethnicity, and this relationship is equally true of the treatment of ethnicity in studies of health status.

In writing reviews such as this one, it becomes problematic to stick to the terminology

used in the original sources cited, and reclassification of, say, "Black" (as an original response category in a study) to "African American" (or vice versa), as a way of allowing information to be summarized, occurs. This moves away from the principle that the exact details of how classification is carried out should always be reported (and, preferably, justified) in studies of ethnicity and health, to keep the constructed nature of the categories fully apparent.

British studies, like those in other places, have been constrained by data availability. There has until recently been little investigation of socioeconomic differences in health within minority ethnic groups in Britain, perhaps because of an influential study based on the 1971 census that found no marked or consistent associations between occupational social class and mortality among migrants to England and Wales.¹⁶ This study concluded that differences in social class did not contribute to mortality differences between migrant groups and the indigenous population.

More recently, social class differences in adult mortality at the time of the 1991 census have been examined, and mortality differences in the conventional direction between the manual labor social class and the non-manual labor social class have been demonstrated among men living in England and Wales but born in the Caribbean, West or South Africa, East Africa, India, Pakistan, Bangladesh, Scotland, or Ireland.¹³ Similar social-class gradients are seen for perinatal, neonatal, postneonatal, and overall infant mortality among different country-of-birth groups. For particular causes of death, however, exceptions to the pattern seen in the overall population are evident: there is no gradient in ischemic heart disease mortality for men born in the Caribbean or West or South Africa, no gradient in respiratory disease mortality among men born in the Caribbean, and a reverse gradient for suicide among men born on the Indian subcontinent.¹³

A recent national study examined socioeconomic differences in self-reported overall health status, diagnosed heart disease, hypertension, respiratory symptoms, and diabetes. With a few exceptions, similar gradients were found among the African Caribbean, Indian or African Asian, Pakistani or Bangladeshi, and White groups.²⁰ Similar data have been reported in other British studies.²¹

Socioeconomic Circumstances and Ethnic-Group Health Differentials

In studies using the same socioeconomic measures within different ethnic groups, health differentials are generally—but not always—

in a similar direction and of similar magnitude in the United States and Britain. Several studies have reported on the influence of socioeconomic circumstances on health differentials between ethnic groups. For example, in some US studies, Black-White mortality differentials have been reported to be almost entirely due to income or class inequalities,^{22,23} while other studies suggest that this explanation is at best partial.^{6,24} In one study, adjustment for an area-based income measure reduced a 47% higher all-cause mortality rate among Black men to a rate that was 19% higher,²⁵ and very similar findings have been reported from other studies (e.g., Sorlie et al.²⁶ and Menchik²⁷).

For particular causes of death, however, the situation is more complex, with socioeconomic adjustment reversing the Black excess in coronary heart disease and essentially abolishing the Black excess in lung cancer, but leaving considerable Black excess in heart failure, myeloma, and prostate cancer mortality in men.²⁵ In Britain, adjustment for social class fails to attenuate the adult mortality differentials according to place of birth; in fact, such adjustment generally increases the differentials, making an already lower rate lower still among Caribbean-born men and an elevated rate higher still among men born in East Africa.¹³

A common response to residual ethnic-group differences in health status seen after adjustment for socioeconomic circumstances is illustrated in a recent study from London. Stewart et al.²⁸ compared stroke rates among a group they defined as Black (Afro-Caribbean, Black-African, and Black-other, according to the 1991 British census categories) and White (a group the authors did not define). The stroke rates were about twice as high among Blacks as among Whites, and statistical adjustment for occupational social class only partly accounted for the elevation; the relative risk of 1.71 among those of working age was reduced to 1.53 after adjustment. The authors concluded that "[e]thnic differences in genetic, physiological and behavioral risk factors for stroke require further elucidation." This conclusion—that if socioeconomic adjustment leaves a residual "racial" effect, then genes, culture, or behaviors are to blame—is a common one in this field.

This approach has several important limitations. First, it assumes that the available socioeconomic indicators are adequate markers of current social circumstances. Several studies (e.g., Davey Smith et al.²⁹ and Goldblatt³⁰) have demonstrated that the introduction of additional socioeconomic indicators into studies relating occupational socioeconomic measures to health outcomes produces additional differentiation of health status. Studies adjusting for a single socioeconomic measure will therefore leave

considerable scope for residual confounding by socioeconomic circumstances.³¹ Models demonstrate the degree to which misclassification of confounders (as socioeconomic position is often treated in studies of ethnicity and health) can leave spurious, apparently "independent" effects of variables on health status. The results found in this field are often entirely within the bounds of what may be expected as a result of such residual confounding.³²

Second, socioeconomic indicators may have different meanings for members of different ethnic groups. Thus, at the same level of income, Black households in the United States have considerably lower wealth than White households³³; within the same jobs, Blacks have greater levels of exposure than Whites to work-related hazards³⁴; education brings lower returns in terms of income, occupational status, and avoidance of unemployment among Blacks than among Whites³⁵; and the purchasing power of Blacks is less than that of Whites at a given income level with respect to food, housing, and other necessary expenditures.³⁶ At a given level of income, occupational position, or educational achievement, Blacks are disadvantaged in other domains with respect to Whites, and adjustment for these factors will not fully adjust for differences in socioeconomic circumstances between the groups.

A similar situation pertains in Britain.³⁷ For example, housing tenure—a commonly used socioeconomic indicator in British studies³⁰—is not an adequate marker of housing quality, since South Asian owner-occupiers are at increased likelihood of being in accommodations that are older, unmodernized, and overcrowded³⁸ or lacking in basic amenities.²⁰ Car ownership has been widely used as an indicator of available income, because income data are not routinely collected in UK data sources such as the census. While car ownership has proved to be a powerful predictor of health status in many UK studies (e.g., those of Davey Smith et al.²⁹ and Goldblatt³⁰), it cannot be used in any simple way to study differences in socioeconomic position between ethnic communities, because driver's license possession varies dramatically between ethnic groups and because different groups place different priorities on car ownership.

As another example, one study found that a considerably higher proportion of Indian-origin men than of European-origin men were in nonmanual occupations, yet income was higher in the latter group.³⁹ Some preliminary evidence shows that the fact that social-position measures have different meanings in different ethnic groups has important implications for studies of ethnicity and health. In a British study, poorer general health status and an elevated prevalence of coronary heart disease were

seen among those of Pakistani and Bangladeshi origin. These differences remained after adjustment for occupational social class, education, and housing tenure (indicators that will indeed have different implications for social circumstances in different ethnic groups) but were essentially abolished by adjustment for a comprehensive index of material conditions and living standards.^{20,40}

Third, area-based measures of social circumstances, which are widely used in health studies, may not be directly comparable across ethnic groups. A British study concluded that tuberculosis was not associated with poverty among South Asians, because area-based deprivation indices that predicted tuberculosis rates among the majority White population did not do so among South Asians.⁴¹ The indicators used in the area-based measures, such as overcrowded housing, housing tenure, and car ownership, are known to have different ethnic group-level associations with income, occupation, and education.³⁹

In the United States, the mortality excesses seen in relation to poverty levels within areas show differences between Blacks and Whites, differences which themselves vary by geographical location within the country.^{42,43} Furthermore, the ethnic-group composition within an area may have health consequences. The proportion of the population that is African American is positively related to mortality rates for African American and other groups, whereas the proportion of the population that is Hispanic shows a U-shaped association with mortality.⁴⁴ These effects are independent of other area characteristics (including median income and educational level) and of individual-level socioeconomic characteristics, and could reflect the fact that some exposures—such as to solid-waste sites, air-polluting plants, and alcohol retailers—are more prevalent for people living in predominantly Black areas.⁴⁵ Conversely, in some circumstances the identification of areas with their ethnic-minority residents can allow the development of strong community ties, enhance political influence, and provide resistance to racist attacks, all of which could act to improve health outcomes.^{46,47}

Fourth, there is growing evidence that socioeconomic circumstances in early life (and even during the lives of previous generations) can influence health in adulthood.^{48,49} Intergenerational influences—from the health and development of mothers—may exist, mediated through fetal development and birthweight, which are related to the adult health of the offspring.⁵⁰ Evidence of lower birthweights among minority ethnic groups within Britain and the United States suggests that these influences may be important.¹⁴ Deprivation in childhood is associated with increased risk for several important causes of death—including stroke,

coronary heart disease, respiratory disease, and stomach cancer—in later life.⁴⁹ In many cases, members of minority ethnic groups will, independent of their social circumstances in adulthood, be more likely to bear the long-term effects of their mothers' having been deprived during pregnancy and also to have themselves been deprived in childhood.

Finally, there are forms of social influence—racism and its effects—that are experienced almost exclusively by members of minority ethnic groups. Racism may influence health through several potential mechanisms,⁵¹ for example, by leading to less favorable socioeconomic circumstances (through educational, occupational, and residential discrimination), through constraints placed on lifestyle choices, or through more direct psychosocial stress effects. Racism cannot be taken to be a given feature of society; its historical roots and current social origins need to be explored.

As Raymond Franklin observed, the adoption of African slavery in the United States—a supposedly democratic society—required the development of an extraordinary rationale: to "declare that all people are entitled to certain inalienable rights and then deny such rights to large numbers of persons needed an ideology that debased Blacks. Racism became such an ideology."^{52(p38)} Perceptions of the general economic marginality of many Blacks from post-slavery times on—with overrepresentation of Blacks in low-status (or no) occupations and poor neighborhoods—in turn feed into continuing segregation, discrimination, and racism. Socioeconomic disadvantages and exclusionary social practices are, in this view, mutually constitutive; the "shadows of race and class" cannot be easily separated.⁵²

Learning to Live With Complexity

The social processes that influence health differences within and between ethnic groups are clearly complex and context-specific. One approach to this complexity has been to call for the abandonment of an issue that is impossible to examine—and that should perhaps remain unexamined.⁵³ Such an abandonment would leave the field peopled only by those keen to demonstrate genetic determinism or to identify cultural practices that require changing. At the same time, it would constitute a failure to take advantage of ways of learning how to improve the health of populations and to better understand the determinants of illness.⁵⁴

In conceptualizing the social determination of ethnic-group differences in health, we should ultimately aim to bridge the gap between the macrosocial and the molecular-biological. This is not an impossible task, as is

shown by a consideration of how much nearer we are today to understanding the up, down, up, down patterns of adult mortality in Britain from 1850 to 1950 and to answering Jerry Morris's question, "What are the *social* changes that underlie the[se] *biological* changes . . . ?"⁵⁵ than was possible when the question was posed. It requires, however, a willingness to consider the particular aspects of these social and biological processes⁵⁶ and not to rely on the illusory comfort of (perhaps metaphorical) meta-theories that appear to explain everything (while accounting for nothing).⁵⁷

With respect to the contribution of socioeconomic circumstances to ethnic-group health differentials, this focus on the particular involves understanding the historical antecedents to any synchronic nexus of social- and ethnic-group membership. Thus, in the face of a labor shortage in the postwar years, British capitalism was led, after attempts at alternative strategies and against considerable resistance, to motivated recruitment—through encouraged immigration—of labor from the Caribbean and the Indian subcontinent. For these laborers, access was limited to unpopular and often simply unpleasant jobs, and opportunities for training and promotion were severely restricted. The current form of socioeconomic disadvantage faced by British ethnic minorities, in an age when the "reserve army of labor" is waiting to meet labor requirements that currently do not exist, can be understood only in the light of this history.⁵⁸

In New York City, the application of microeconomic planning theory led to a reduction of services and the deterioration of ethnic minority neighborhoods, which in turn exacerbated the tuberculosis, AIDS, and drug-use epidemics.⁵⁹ In this way, a strategy to deal with the tendency for the rate of profit to fall has resulted in falling CD4 cell counts in people who are conspicuously failing to benefit from the economic growth enjoyed by the already privileged.

It is not surprising that the outcome of such macrosocial forces cannot be summed up by simple measures of individual socioeconomic position in adulthood. For minority ethnic groups, the social world will produce both social and biological effects with long-term impacts. Low birthweight, infections acquired in childhood, and suboptimal childhood development will all influence health in adulthood, as will socially determined less favorable educational outcomes (and the later social circumstances they provide access to) and the effects of discrimination in schooling and residential location. The disadvantages already existing when a member of an ethnic minority enters adulthood will be amplified by the less favorable social trajectory these very disadvantages lead to.

This social trajectory includes a world in which there is a high level of inequality in economic resources, increasing competition for social goods (such as good-quality housing in favorable residential locations) to a level at which the less-well-off cannot compete. Poorer members of highly unequal societies may thus live in less favorable environments than similarly poor members of more equal societies.⁶⁰ As W.E.B. Du Bois said long ago, "To be a poor man is hard, but to be a poor race in a land of dollars is the very bottom of hardship."⁶¹ □

Acknowledgments

George Davey Smith's work on ethnicity, socioeconomic position, and health is supported by the Health Variations Programme of the Economic and Social Research Council. Many thanks to Nancy Krieger, Margaret Kelaheer, Helen Lambert, James Nazroo, and Jane Ferrie for comments on an earlier draft of this article.

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