

Beyond Class, Race, and Ethnicity: Deprivation and Health in Britain

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The concepts of class, race, and ethnicity figure prominently in health services research in Britain. Occupational class has been employed for nearly a century to investigate social inequalities in health and access to care. More recently, researchers have identified differences in health status and utilization between ethnic groups. This article examines how these constructs are defined in Britain and identifies some key research associated with them. It also draws attention to the considerable problems in using class and ethnicity to stratify the population. The authors conclude that a new approach that directly measures individuals' material and social resources needs to be developed.

Key Words. Race, ethnicity, health status, Great Britain, socioeconomic deprivation, inequality

For more than a century, British social research has used information about occupation to stratify the population. More recently, categorizations based on ethnicity or race have been used for similar purposes. These constructs have proved to be powerful and persistent ways of differentiating groups in a huge and diverse range of social and economic studies in Britain. Health services research is no exception. There is a long tradition of interest in the health of disadvantaged sections of the community, and measures of occupational class and ethnicity have served to highlight significant differences. Unfortunately, many empirical studies use simple dummy variables as crude proxies for complex combinations of social, economic, and cultural circumstances. Such broad distinctions between occupational classes and ethnic groups conceal more than they reveal. If the principal focus of attention, as is often the case, is to assess the consequences of socioeconomic circumstances for health status, then a more sophisticated approach is required.

This article has three main aims. First, it reviews the way in which occupational class and ethnicity are defined in Britain and illustrates how these concepts have been used in health services research. Second, it

provides a critique of the use of class, race, and ethnicity, identifying some of their key weaknesses and the ways in which researchers have attempted to overcome them. An important part of the recent research agenda has been the recognition that class and ethnicity are frequently used as proxies for different forms of social and economic disadvantage and that it might make more sense to measure such deprivation more directly. The final part of the article outlines the most comprehensive attempt so far in Britain to operationalize measures of deprivation.

DEFINITIONS

SOCIAL CLASS

There is a substantial history in Britain, dating back to 1851, of measuring social differences in health on the basis of occupational groups. Occupation is recorded in the decennial census and on birth and death certificates, as well as in some health records. Most social surveys also include occupation as a means of stratifying the population. Although some analysis is based on individual occupations, much more commonly occupations are grouped.

In 1911, the registrar general developed an occupational classification—commonly known as social class—to analyze infant mortality. The concept was based on homogenous groups of occupations, identified and hierarchically ranked according to the degree of skill involved and the “general standing” of each occupation. Although the categories have remained constant since they were established, the allocation of occupations within them is revised every decade to take account of changes in skill and “standing.”

Table 1 shows the distribution of men and women of working age by social class in 1991. It is important to note the very marked gender differences. One of the weaknesses of the reliance on occupational class is that a very high proportion of women cannot be stratified by their own social position. For this reason, men and single women are allocated to a class on the basis of their current occupation, while married women are allocated to their husband’s class and children to their father’s class. The retired and unemployed are allocated on the basis of their last occupation.

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Table 1: Registrar General's Classification of Social Class, 1991
 Census, Adults of Working Age Classified by Own Occupation

Social Class	Classification	Percentage of Population in 1991		
		Men	Women	All
I	Professional occupations (e.g., doctors and lawyers)	5.9	1.2	3.4
II	Managerial and technical occupations (e.g., teachers and most managerial and senior administrative occupations)	23.8	16.9	20.3
IIIN	Nonmanual skilled occupations (e.g., shop assistants and clerks)	9.4	24.1	16.9
IIIM	Manual skilled occupations (e.g., bricklayers and coal miners)	27.3	4.3	15.6
IV	Partly skilled occupations (e.g., bus conductors and postmen)	12.9	10.3	11.6
V	Unskilled occupations (e.g., porters and laborers)	4.4	4.3	4.3
Other	Armed forces, those on a government scheme, inadequately described	3.1	1.3	2.2
Excluded		2.4	1.3	1.8
Economically Inactive		10.7	36.4	23.8
Total*		1,441,146	1,509,204	2,950,350

*Based on a 10 percent sample of the population of England.

Source: Derived from Office of Population Censuses and Surveys, 1993.

Measures of social class based on occupation have been used in a plethora of studies in health services research to illustrate inequalities in mortality, morbidity, access to care, and health-related behaviors. The evidence from Britain suggests that individuals from lower occupational classes experience relatively more premature mortality (Townsend and Davidson 1982) and higher rates of morbidity (Blaxter 1990; Thomas, Goddard, Hickman, and Hunter 1994) than those in professional and managerial groups.

Perhaps the most famous British example of the use of class in health services research is the Black Report. This showed that, in the early 1970s, men and women in occupational class V had a two-and-a-half times greater chance of dying before reaching retirement age than their professional counterparts in occupational class I. The Black Report concluded that

class differences in mortality are a constant feature of the entire human lifespan. They are found at birth, during the first year of life, in childhood,

adolescence and adult life. At any age people in occupational class V have a higher rate of death than their better-off counterparts. (Townsend and Davidson 1982, 41)

In the decade or so since the Black Report was published, its analyses and conclusions have been subjected to a great amount of scrutiny. The result has been confirmation of the very considerable extent of health inequalities among different social groups in Britain (Davey Smith, Bartley, and Blane 1990).

Evidence about access to health care is less clear. In the 1970s, Le Grand (1978) found that individuals from higher social classes used more health care resources relative to their need than those from lower classes. This work, however, has been challenged by Collins and Klein (1980) and O'Donnell and Propper (1991), who found that groups with lower social status used more health care resources relative to need than more advantaged groups.

A number of studies (e.g., Waller, Agass, Mant, et al. 1990) have found an inverse class gradient in relation to attendance at health checks and other preventative services. Bennett and Smith (1992) found lower immunization rates among lower social classes, which seemed to be related to their perception of the importance of immunization. More generally, class differences in the factors that underlie treatment-seeking behavior have received little research attention in Britain. One exception is a study by Blaxter (1985), who found class differences in the interaction between people's perception of control over their health and consultation patterns. A number of studies have also reported evidence of inequalities in relation to duration of medical consultations (Buchan and Richardson 1973) and the amount of information patients receive from their general practitioners (GPs) (Cartwright and O'Brien 1976).

In relation to lifestyles, while there is a clear gradient in smoking, with a higher prevalence among lower social classes, alcohol consumption shows no such gradient (Thomas, Goddard, Hickman, and Hunter 1994).

RACE AND ETHNICITY

The ethnic composition of Britain's population assumed its modern character with the advent of large-scale postwar migration from the former British colonies in the Caribbean and South Asia. These migrations added to earlier migrant populations, principally from Ireland and continental Europe. However, one conceptual problem that arises is that different migrant populations

have been described quite differently on the basis of skin color, religion, nationality, and so on. The contemporary ethnic mix of the British population is a complex one. The official taxonomies employed to describe it, such as that used in the decennial census in 1991, reflect this history.

In 1991, the Office of Population Censuses and Surveys estimated that Britain's non-European minority ethnic population was 3 million, about 6 percent of the total population (OPCS 1992). Approximately half of these three million were born in Britain (Thomas, Goddard, Hickman, and Hunter 1994). Table 2 shows the breakdown of the British minority ethnic population based on the 1991 census. The single biggest minority group is Indian, with both Caribbean and Pakistani people making up a significant proportion of the remaining nonwhite population.

Relatively few substantial empirical studies examine the health status of minority ethnic populations, as opposed to social classes. Most national studies have of necessity restricted their analyses of ethnic populations to people born abroad (Marmot, Adelstein, and Bulusu 1984; Balarajan and Bulusu 1990). Other studies rely on a more general notion of ethnicity, which is allotted either through interviewer observation or respondent self-classification. Despite these differences, most studies focus on one or more groups from a broadly similar breakdown of Britain's minority ethnic population.

Such studies raise important questions about differential mortality rates and access to care. The Immigrant Mortality Study found, for various immigrant populations, raised mortality rates due to coronary heart disease,

Table 2: Ethnic Classification, 1991 Census

<i>Ethnic Group</i>	<i>Proportion of Population in Great Britain</i>
White	94.5%
Black, Caribbean	0.9
Black, African	0.4
Black, other	0.3
Indian	1.5
Pakistani	0.9
Bangladeshi	0.3
Chinese	0.3
Other groups	0.9
Total	100.0%

Source: OPCS 1992.

cerebrovascular disease, diabetes, tuberculosis, accidents, and maternal and infant mortality (Marmot, Adelstein, and Bulusu 1984). However, the possibility of health selection biases among immigrants restricts any attempt to generalize those findings to the minority ethnic population as a whole.

Relatively little is known about general patterns of morbidity, although recent data show that a number of measures of self-reported health are significantly worse in Caribbean and South Asian populations (Benzeval, Judge, and Smaje 1994). In the case of health care utilization, there appear to be lower rates of use for most younger age groups for outpatient care. However, there is no convincing evidence of ethnic differences in relation to inpatient utilization (Balarajan, Raleigh, and Yuen 1991). In contrast, age- and class-adjusted GP consultation rates tend to be higher for most minority ethnic groups, particularly at older ages (Balarajan, Yuen, and Raleigh 1989).

CRITIQUE OF CLASS AND ETHNICITY

One of the reasons why categorizations of social class and ethnicity have been so frequently used in health services research is that they have provided a useful shorthand way of reflecting substantial variations in socioeconomic circumstances that might have a bearing on health. They have helped to highlight the importance of social factors as determinants of health. It is important to recognize, however, that they do so only in a very crude way. The practical weaknesses of both concepts need to be acknowledged.

SOCIAL CLASS

The historic value of data about occupational class rested on the centrality of male employment providing a good social indicator of the standing of the whole population. But dramatic changes in demographic, economic, and social patterns in the second half of the twentieth century make that centrality no longer tenable. Conventional measures of occupational class are increasingly called into question by growing social phenomena that include the survival of elderly people for many years after retiring from their principal occupations; the transformation of the labor market position of women brought about by new opportunities in education and greater control over reproduction; and the emergence of a number of groups, such as economically inactive lone parents, who are often socially marginalized.

Overall, it is the classification of women that presents the most serious difficulties to a social stratification of the population based on occupation. Table 1 showed that in 1991 36 percent of women of working age could not be allocated an occupational classification of their own. Most studies, therefore, have analyzed married women's mortality by their husbands' occupational group while classifying single women by their own occupation. As a result, "meaningful comparisons cannot be made between women in different marital status categories. . . . One consequence of these deficiencies is that the effect on women's health of their social circumstances is given little attention when health inequalities are discussed" (Moser, Pugh, and Goldblatt 1990, 146).

Equally problematic are comparisons of social class differences in health over time. Changes in the occupational structure of the British population have led to substantial changes in the balance of classes in the last 50 years. In particular, social class I has grown, and social class V has shrunk. In 1991 the size of the two groups was approximately equal, whereas 50 years earlier, the numbers in social class V were seven times greater than in social class I (Carr-Hill 1990). Many commentators argue that, with such marked alterations in the underlying distribution and size of occupational groups, meaningful comparisons cannot be made across time (e.g., Illsley 1986).

Given the growing unease about social class, other indicators of socio-economic status have become increasingly important as means of stratifying the British population. Saunders (1984) argues that "social and economic divisions arising out of ownership of key means of consumption such as housing are now coming to represent a new major fault line in British society" (p. 203). In addition, data on measures of consumption such as housing tenure and car ownership are more reliable and easier to collect than occupational class (Arber 1991).

The attraction of these alternatives to social class can be illustrated with reference to the analysis of female mortality. In the OPCS Longitudinal Study, which links census data to vital statistics for a 1 percent sample of the population, 47 percent of women cannot be allocated to an occupation (Moser, Goldblatt, and Pugh 1990). Yet the unallocated group has the worst mortality. In contrast, using housing tenure and car access as a proxy for economic status allows 97 percent of women to be included in the analysis. Table 3 shows very clear gradients for all women living in private households. Owner occupiers with access to a car experience the lowest

Table 3: Female Mortality by Housing Tenure and Car Access, Standardized Mortality Ratios, 1976–81

<i>Car Access</i>	<i>Housing Tenure</i>			<i>Percentage of Sample</i>
	<i>Owner</i>	<i>Private Rent</i>	<i>Public Rent</i>	
Car(s)	78	85	99	54.3
No car	106	138	138	42.7
Percentage of sample	43.2	15.9	37.9	97*

Note: Mortality in women at ages 15–59.

*N = 1550, but 43 deaths (3 percent) were recorded among women living in nonprivate households.

Source: Moser, Pugh, and Goldblatt 1990.

rate of premature mortality, while the highest rate occurs among women in public housing without a car.

ETHNICITY

Empirical approaches to ethnicity have also failed to keep pace with social change. For many years the statistical sources in Britain have been dominated by country-of-birth data that reflect the experience of immigration from the “New Commonwealth” in the 1950s and 1960s. But inferences about the experience of all members of a minority ethnic group based simply on those born abroad are increasingly questionable.

A number of commentators have argued that ethnic taxonomies themselves are deeply flawed (e.g., Ahmad and Sheldon 1991). The 1991 census question, for example, combines notions of race, ethnic identity, and nationality, but no persuasive case is made as to why these characteristics should be conflated in such a way. There is also the problem that ethnic categories themselves are always changing. There is some evidence to suggest that, over time, many people change the way they choose to classify themselves. It is not possible for a fixed taxonomy to encompass this dynamic aspect. Finally, the inevitable tendency of ethnic taxonomies to aggregate heterogeneous groups of people into single categories obscures significant variation; one example is the use of the term “Asian” to denote populations of great diversity.

Another area where a more careful approach is required is the investigation of the interactions between socioeconomic circumstances, ethnicity, and racial harassment and discrimination. Not all people from minority

ethnic groups are disadvantaged or feel discriminated against, even though many are. It is important to be clear, therefore, about which factors hypothesized to be associated with poor health are under investigation. Failure to take sufficient account of confounding can produce very misleading inferences, which must be addressed in any analysis of racial or ethnic inequalities in health.

A number of studies in the United States have investigated the relationship between ethnicity, socioeconomic status, and health. Rogers (1992) found that the ethnic gap in mortality was no longer significant once marital status, family status, and income had been taken into account. However, Sorlie, Rogot, Anderson, et al. (1992) found that the difference remained after they controlled family income. Clearly, it is important to continue to investigate the complex relationship between ethnicity, class, and health.

NEW APPROACH TO DEPRIVATION

Despite the technical weakness of the designations, both lower social class and minority ethnic status are associated with adverse socioeconomic circumstances. Because socioeconomic disadvantage is thought to be associated in turn with poor health, much analysis of inequalities in health has found it both convenient and effective to rely on those class and ethnic groupings that data sources yield, despite their relative crudity. However, the authors believe that neither class nor ethnicity, as presently defined and measured, serves as an adequate proxy to capture the diversity of material and social circumstances that affect health. It would be far more helpful to investigate people's material and social circumstances more directly.

It is particularly important that the fullest possible information about material circumstances should be combined with data about social conditions so that a proper assessment can be made about the extent of disadvantage or deprivation that people experience. Peter Townsend (1987) has developed the most thorough attempt to do this in Britain.

Deprivation may be defined as a state of . . . disadvantage relative to the local community or the wider society or nation to which an individual, family or group belongs. . . . People can be said to be deprived if they lack the material standards of diet, clothing, housing, household facilities, working, environmental and locational conditions and facilities which are ordinarily available to their society, and do not participate in or have access to the forms of employment, occupation, education, recreation, family and social activities and relationships which are commonly experienced or accepted. (125, 140)

Townsend and his collaborators attempted to operationalize this approach to deprivation in a Survey of Londoners' Living Standards (SLLS) in the mid-1980s. Data about 13 separate components of material and social deprivation were collected from a representative sample of 2,703 adults (Townsend and Gordon 1989).

It is widely recognized that many features of the material and physical environment affect health, and seven distinct aspects of this are contained in the SLLS: diet, clothing, housing, consumer durables, environmental hazards, local facilities, and working conditions. These seven groups include 48 individual components of material and physical deprivation such as measures of malnourishment, inadequate protection against the weather, poor living space, access to local services, safety, and exposure to pollution.

But it is also the case that many aspects of social deprivation might plausibly be associated with poor health. There is a growing body of evidence that such factors as social isolation, sexual discrimination, or racial harassment can be just as important in determining poor health as low income or poor housing. The most substantial recent study of health and lifestyles in Britain concluded that "there is much evidence that variables which are more 'social' or personal than socio-economic—social support, integration or isolation, social networks, social roles and activities—are closely associated with health" (Blaxter 1990, 102).

Some of these factors are included in the modified Townsend index, which contains six distinct components: employment rights, family activity, integration into the community, formal participation in social institutions, recreation, and educational attainment. Twenty individual indicators include measures of social isolation, racial harassment, discrimination at work, poor education, and restricted social activities.

Benzeval, Judge, and Solomon (1992) used the SLLS data to explore the relationship between deprivation and health. Following Townsend's approach, they created an index of deprivation across the 13 components, which were collapsed into four categories. The index is closely related to measures of occupational class but covers more of the population.

Table 4 illustrates the relationship between deprivation and subjective health status. Only one-half of the most deprived of the survey respondents report themselves as being in good health, compared with almost 90 percent of the least deprived. The contrast between levels of deprivation and self-reported poor health is even more marked; the most deprived are almost ten times as likely to report poor health as the least deprived.

Table 4: Deprivation and Subjective Health Status

Subjective Health Status	Deprivation Categories				N
	Low 1	2	3	High 4	
Good	86.6%	76.7%	68.1%	51.4%	1941
Fair	11.4	18.9	25.9	30.3	579
Poor	1.9	4.5	6.0	18.4	174
N	411	1076	837	370	2694

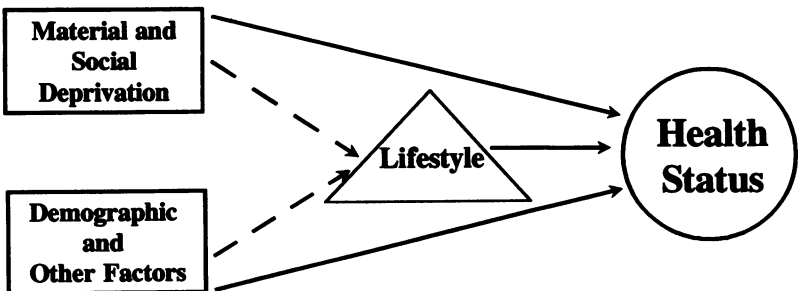
Q: "Generally, is your health good for your age, fair or poor? I mean during the past 12 months, not just at the moment."

Source: Benzeval, Judge, and Solomon 1992.

The real importance of more detailed attempts to measure material and social deprivation, however, is not to produce an index but to be able to explore the relative importance of the putative determinants of health in greater depth. Figure 1 presents the kind of conceptual framework the authors have in mind. It suggests that demographic, material, and social factors have both a direct influence on health status, and an indirect effect through lifestyles. To estimate the relative importance of these different factors for individuals' health, multivariate models have been developed using the SLLS. The detailed results are reported elsewhere (Benzeval, Judge, and Solomon 1992), but the main conclusions are set out below.

In terms of material deprivation, the direct significance of poverty is the most difficult to substantiate because of the absence of a satisfactory measure of equivalent income. Nevertheless, the significance of measures of inadequate diet, not owning a car, and having spent at least one period of life in poverty are strongly suggestive that low income is associated with poor health. Poor housing is also consistently associated with a number of

Figure 1: Factors Affecting Health



measures of health status. Environmental factors—covering both pollution and the availability of local facilities—are also significant.

Having controlled for other factors, the researchers found that individuals who felt either isolated and alone or discriminated against at work were particularly likely to report poor health. For example, in both cases, those who felt this way were twice as likely to report their health as only poor or fair, at least 60 percent more likely to have been ill in the previous two weeks, and two-and-a-half times as likely to say their health had been a major problem in the previous 12 months. In addition, concern about a family member, and having a number of different social roles, are significant for several measures of health status. Lifestyle factors such as smoking, and personal characteristics such as age, are also associated with poor health but do not suppress the importance of material and social deprivation.

The main significance of these findings is that they support the notion that a large number of socioeconomic factors can and do have independent effects on health. These factors provide a richness of understanding that is lost when potentially causal factors associated with health are restricted to aggregate data based on class or ethnicity. For example, the aggregate measures of ethnicity available in the SLLS were not associated with health status, but an indicator of discrimination—not normally included in health surveys—was statistically significant.

Analysis of gender differences in health illustrates the potential of this approach in increasing researchers' understanding of the relative importance of different determinants of health for distinct social groups. Such an analysis would be particularly valuable in examining the health of minority ethnic populations. Unfortunately, the sample size of SLLS prevented the authors from doing such an analysis.

Modeling subjective health status reveals that factors with similar effects on men and women include poverty experiences, discrimination at work, smoking, poor education, and anxieties about other family members. The main differences, however, appear to be related to the relative importance of material and social deprivation. Men suffer more ill health as a result of poor material circumstances and excessive drinking, whereas social deprivation is more important for women. Positive social roles (Arber 1991) appear to be more protective of health for women than for men. There are also subtle differences in relation to social isolation. Men are more likely to report poor health if they live alone, but *perceptions* of loneliness regardless of household circumstances seem to be important for women.

Perhaps the most important feature of this analysis is that it demonstrates how subtle differences between the health-related experiences of social groups can be masked by an excessive reliance on highly aggregated variables such as class and ethnicity. The findings presented here suggest that, even after the analysis controls for quite detailed socioeconomic characteristics, there are significant differences between men and women in the ways in which they react to deprivation. It is not inconceivable, therefore, that when data sets become available that take account of both ethnicity and deprivation in more sophisticated ways than is usually the case, other differences between subgroups of the population may emerge.

CONCLUSION

One of the most important and relatively neglected questions for health policy analysts to address is what can actually be done to improve the health of people who are deprived in various ways, with particular attention being focused on those who are the most disadvantaged. Serious progress in beginning to answer this question requires a much better and wider appreciation of the socioeconomic determinants of health.

One of the primary tenets of this article is that the terms "class" and "ethnicity" are crude concepts associated with many ambiguities, inconsistencies, and/or contradictions. Insofar as class and ethnicity are being used as proxies for deprivation, the authors suggest that more direct forms of measurement are more appropriate. But even if the focus of attention is to investigate whether or not there is something distinctive about the health experiences of different social or ethnic groups, then all potentially confounding factors must be taken into account. Failure to do this runs the risk of either exaggerating social differences or of missing them altogether.

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