Describing Ethnicity in Health Research

HANNAH BRADBY

Department of Sociology, University of Warwick, Coventry, UK

ABSTRACT

Commentators have criticised the terminology used for the classification of ethnic and racialised groups in health research for a number of years. The shortcomings of fixed-response categories include the reproduction of racialised categorisations, overemphasis of homogeneity within groups and contrast between them, and failure to offer terms with which people identify and which can express complex identities. The historical injustices against black and minority groups are reflected in terminology and explicitly recognised when discussing 'race' as a social construction. The exaggeration of homogeneity within groups and contrast between them is a racialising effect of fixed classifications. Self-assigned ethnic group avoids some of these difficulties by allowing multiple affiliations to be described, but introduces the costs of processing free text. The context-dependent nature of individual ethnic identity makes comparison problematic. Researcher-assigned ethnicity can increase comparability and consistency but may be at odds with self-identity. The complexity of ethnicity itself and of its relationship with socio-economic group and racism makes proxy measures inevitably inadequate. If researchers continue to try to capture the complex and contextual detail of ethnicity, it may become clear that the general concept of ethnicity covers such a wide and specific range of experiences as to render it of limited use in making comparisons through time or across cultures.

Keywords: language, terminology, classification

INTRODUCTION

Ethnic categories used in research are widely agreed to be unsatisfactory in both theoretical and practical terms (Bhopal *et al.* 1997). Commentators call for 'fresh thinking' (Rankin and Bhopal 1999) and a widespread debate (Bhopal *et al.* 1991) to develop a 'meaningful and sensitive descriptive vocabulary' (Walker 1998) and greater creativity in conceptualising and operationalising ethnicity in research. Despite the unsatisfactory terminology, quantitative and qualitative research nonetheless persistently demonstrates compromised health and health care of ethnic minorities that may not be wholly accounted for by socio-economic group (see Glossary) differences (Krieger *et al.* 1993; Bhopal 1998; Nazroo 1998, 2003).

This paper summarises criticism of ethnicity terminology in English-language health research, particularly the fixed-response schemes used in the census and other surveys. Self-identification by respondents avoids certain problems of pre-designated categories

Address for correspondence: Hannah Bradby, Department of Sociology, University of Warwick, Coventry CV4 7AL, UK. E-mail: H.Bradby@warwick.ac.uk

but fails to do justice to other aspects of ethnicity. The incorporation of people's self-identification through pre-survey research and free-text responses mitigates the excesses of fixed-response categorisation. Historical value systems influence both identity and the social context of minorities and are part of any ethnic classification. The role of racialised (see Glossary) values in creating such inequalities raises the perennial question of their reification and perpetuation through current classifications. To acknowledge the role of discrimination but not to perpetuate it in studying its ongoing effects presents an unresolved challenge to researchers of ethnicity and health.

To achieve this in a way that also manages to reflect the complex and contingent nature of ethnicity does not make the challenge any easier to achieve. Commentators are generally optimistic that with adequate effort invested into gathering appropriate detail, categorisation problems can be overcome and inequalities in health and health care can be more accurately documented and rectified. The possibility is raised that research which concentrates on the local specificities in defining ethnicity and its relationship with health may underline the problematic nature of comparisons between cultures and through time.

CRITICISM OF ETHNIC GROUP CLASSIFICATIONS

Fixed-response Categories

The fixed categorisation of ethnic identity employed by government agencies provides national figures for comparative purposes. The classifications for ethnicity used by the Office of National Statistics in the UK (http://www.doh.gov.uk/ethdevlist3.htm) and the Office of Management and Budget classification in the USA (http://www.whitehouse. gov/omb/fedreg/race-ethnicity.html) provide denominator data for a range of health and social surveys. These government-sponsored classifications gain credibility as they are replicated in surveys requiring an ethnicity variable and so play an important role in constructing, as well as reflecting, ethnic identities. Official classifications are subject to scrutiny and criticism by health researchers (Bhopal *et al*. 1991, 1997; Smaje 1995; McKenzie and Crowcroft 1996; Bennett 1997; Nazroo 1997; Anderson and Fienberg 2000) and by activists (Association of MultiEthnic Americans n.d.). The lack of an explicit theoretical rationale underpinning categories has been identified as a major problem, leading to a mix of divisions based variously on nationality, colour, continental origin, racialisation and ethnicity.

A fixed classificatory system lacking internal logic may nonetheless reproduce a racialised view of human diversity. Schemes that operate a skin colour grading are in danger of replicating the nineteenth-century hierarchies which judged people's moral worth on the basis of physical appearance. Classifications with a disproportionate number of pre-designated divisions for minority groups, which leave the ethnic majority undifferentiated, may represent a legacy of a racialised research agenda that scrutinises exotic or deviant groups, while ignoring the 'normal' white majority. Health outcomes for minorities are frequently compared against the 'white' group as the index category, implying that the 'white' pattern is not just the majority experience, but also normal and even desirable in some sense (Senior and Bhopal 1994; Bhopal and Donaldson 1998). A fundamental problem with fixed-response classifications that imply mutually exclusive groups is that they affirm the possibility of dividing humanity into discontinuous groups, thereby supporting, albeit tacitly, a racialised view of human diversity.

Racial or ethnic classifications?   One response to this concern has been the call to abandon the term 'race' in favour of 'ethnicity' (e.g. Bennett 1997; Bhopal and Donaldson 1998; Fullilove 1998), on the grounds that its continued use perpetuates the misapprehension that racialised differences are discrete, scientifically recognised and

potentially biologically constituted. Since race or ethnic group categories are widely agreed to be socially constructed, descriptions of ethnicity are promoted as better reflecting this (Bradby 1995). The prediction of health outcomes by race is put forward to support its ongoing relevance as an analytical term (Williams 2002), demonstrating its deep embeddedness as a social concept (Anonymous 1999). The idea of a 'popular folk concept of "race" ' describes the ongoing relevance of racialised constructions of blackness and whiteness in everyday social contexts (Ifekwunigwe 2001: 42).

Attempts to modify language to minimise the racist implications of terminology may be misplaced given that much research literature treats 'race' and 'ethnicity' as synonymous and frequently uses them together as 'race/ethnicity' (Bhopal 1998, 2001). Even where it is apparently ethnicity that is under discussion, racialised notions creep in, as with the suggestion that agreement on 'how culturally or ethnically to demarcate the people of the world' will come only when 'people stop mixing' (McKenzie and Crowcroft 1996). Even if intended ironically, this comment implies the existence of demarcated groups of people, admixtures of which could be mapped.

Whether 'race', 'ethnicity' or 'race/ethnicity' are under consideration, the operationalisation of the term is often left undefined in empirical work (Fustinoni and Biller 2000). In one study, explicit definition of racial/ethnic categories was found in only a minority (8.4%) of the papers sampled (Ahdieh and Hahn 1996), raising the question of whether the same characteristic was being studied. Where race and ethnicity are formally defined as separate variables, any analytic gain may be non-existent in practice, for instance where 'Hispanic' is designated as both a race and an ethnicity (Lauderdale and Goldberg 1996).

Historical burden of classifications.   Even if the language of 'race' is eschewed, the historical context in which our current concepts have been shaped cannot be ignored. The value systems that upheld slavery and racist discrimination continue to influence the ways that we think about human diversity and, via institutionalised racism, the ways that social structures operate. This is reflected in shifting terminology, particularly where a group is struggling for recognition and equal opportunities. For example, the British ethnic majority have shifted in their understanding of the acceptable nature of terms such as 'Negro', 'coloured' and 'black' over the past several generations.

The assumption of negative attributes on the basis of racialised or ethnic group markers has been shown to have serious implications for the delivery of health care (Ahmad 1993; Bowler 1993) and health outcomes (Krieger *et al*. 1993; Karlsen and Nazroo 2002). The material legacy of poverty and lack of cultural capital (see Glossary) among groups who have suffered consistent discrimination, and the consequent health inequalities, is another aspect of the context in which ethnicity must be defined and interpreted. In both the UK and the USA a long-standing association between material deprivation, minority ethnic status, and the experience of racism means that ethnicity and socio-economic group cannot be treated as independent variables (Smith 2000; Nazroo 2003).

Invisible heterogeneity.   Classificatory systems that employ broad categories, whether ethnic or racial, are open to the accusation of assuming or exaggerating homogeneity within each group and focusing on contrast between groups rather than similarity (Aspinall 1998a). In Britain, the category 'South Asian' implies ancestry in the Indian subcontinent—India, Pakistan, Bangladesh and Sri Lanka. A diversity of national, religious, educational and economic backgrounds are encompassed by this category, although the great majority of 'South Asians' migrated to Britain during a relatively narrow time period (Bhopal *et al*. 1991). Including a wide range of experience and exposure in a single category has consequences for the measurement of health risks.

When detailed ethnic categories are used to consider, for example, coronary heart disease in the catch-all category 'Asians' (Bhopal *et al*. 1999) and sexually transmitted infections in 'blacks' (Low *et al*. 2001), a diversity of health outcomes is found. Similarly, the category 'white', used widely in British research, has been shown to include groups with divergent risks of premature mortality (Wild and McKeigue 1997).

Fixed-categorisation of ethnicity can fail to reflect mixed or multiple identities. Descent from more than one ethnic group may only be signalled through potentially marginalising categories such as 'other' or 'mixed—specify'. Having a single 'mixed' category for all those who are not 'pure' has overtones of racialised notions of miscegenation (Ifekwunigwe 2001) and prevents the expression of multiple group affiliation.

In contrast with externally imposed taxonomies, definitions of ethnicity have emphasised individuals' own identification with their group. However, any pre-determined classifications may suffer from people failing to identify with the categories employed such as 'British Asian' or 'African American' (Zenilmann *et al*. 2001). The 1991 British census categories fail to encapsulate self-identity for a sizeable proportion of the minority and majority ethnic populations. Studies have shown that when asked to describe their own ethnic identity, a substantial proportion of the ethnic majority (McAuley *et al*. 1996) and minority groups (Rankin and Bhopal 1999) gave complex responses that could not be reflected through the 1991 British census categories.

Self-assigned Identities

One response to criticism of pre-designated taxonomies has been to allow respondents to define their own ethnic identity (Smith 2002). The use of free-text responses permits hybrid identities to be expressed, avoiding the problems of imposing a pre-designated taxonomy. However, free-text responses in large-scale surveys require a high level of processing and, with quantitative analysis, re-coding into a limited number of categories is likely to take place at some point. In this sense free-text responses simply delay the necessity of imposing a limited number of broad categories (Aspinall 1998b). The combination of fixed responses, carefully researched to reflect preferred vernacular terms, with free-text options has been recommended for survey work (Aspinall 1997). However, no method will iron out the shifts due to the labile, context-dependent nature of ethnic self-identification. While changes in self-identity at the individual and group level are worthy of study in their own right, they present difficulties for administrative categories (McKenney and Bennett 1994) and research that seeks to monitor ethnicity over the long term. While self-identification is an important aspect of ethnicity, it does not override the role of group identity, ancestry, descent (Modood *et al*. 2002) and a common place of origin in its definition.

Researcher-defined Identity

The aspect of descent or common origins included in an operationalisation of ethnicity may be information to which individual respondents have no access or in which they have no interest. In survey research, particularly when undertaking secondary analysis, the ethnicity of populations may be assigned through some combination of name analysis, country of birth, language, religion, date of migration, and parents' country of birth and without recourse to a person's self-assignation. Ethnicity assigned by a researcher in this way may not coincide with the category that the individual would choose as reflecting his/her own identity. Researcher-assigned ethnicity may thus differ from a self-identification of ethnicity. But, of course, self-identification can vary with research method—for instance, the difference between ticking a box in a structured questionnaire and describing one's ethnic identity during an in-depth interview. Different

approaches to operationalising the theoretical concept of ethnicity thus give different weight to self-identification and aspect assigned by the researcher. The choice must, of course, be driven by and justified in terms of the research question under investigation (McKenzie and Crowcroft 1996; Aspinall 2001). The great range of proxies for various dimensions of ethnicity (e.g. having migrant parents, living in a particular neighbourhood, occupational segregation, religious belief, dietary practice, marriage patterns, the experience of racism, name analysis, etc.) offers a wide range of potential combinations.

COPING WITH COMPLEXITY

The criticisms of ethnic categorisations described hitherto all concern the inadequacy of proxy measures to capture the complexity of ethnicity and of the socio-economic context in which ethnicity is played out. It is argued that our current conceptual apparatus (Bhopal 1997) cannot cope with the dynamic complexity of ethnicity (Aspinall 1997; Pfeffer 1998). This becomes apparent when comparisons are attempted across data systems (McKenney and Bennett 1994) or between countries (Bhui and Bhugra 2001). It has been suggested that ethnicity is just too complex for a classification of the simplicity necessitated by official statistics (Hilton 1996). The complexity of the context in which ethnicity must be interpreted is also likely to expand as it becomes less acceptable to consider ethnicity without also taking gender and socio-economic class into account (Krieger *et al*. 1993; Bennett 1997; Williams 2002).

Krieger and colleagues point to the impossibility of understanding complex multiple identities and health risks within existing additive or multiplicative models. They suggest that conceptual models have failed to develop to the same level of sophistication as statistical techniques because of the 'uncomfortable' nature of the subject matter (Krieger *et al*. 1993). Since their comments, guidelines and recommendations on recording ethnicity as a sound epidemiological variable (Senior and Bhopal 1994; Bhopal 1997) and for medical research in general (*British Medical Journal* 1996; McKenzie and Crowcroft 1996) have been formulated but not widely adopted (Bhopal *et al*. 1997). Despite clear exposition of the pitfalls and merits of the range of means of operationalising ethnicity (Aspinall 2001), health researchers have shown reluctance to abandon the 'folk concept' of racialised groupings to move to precise, although perhaps long-winded, descriptions of ethnic group assignation.

Cases of empirical work that employ an explicit, detailed description of how ethnicity is operationalised show the great specificity of what is under consideration. For instance, Low and colleagues offer a precise description of the procedures that were followed in allocating partially recorded ethnic group data to consistent categories (Low *et al*. 2001). Williams and colleagues use name analysis to identify a Punjabi population in the west of Scotland (Williams *et al*. 1993). If such specificity in defining operationalised ethnicity becomes widespread, then the variety of what is covered under the broad ethnic categories that have been employed in the past will become ever more apparent. If capturing the complexity of ethnicity continues to be given more weight in the operationalisation of the concept, then the consistency of categories and the possibility of comparison between them are called into question.

CONSISTENCY, COMPARABILITY AND COMPLEXITY

The content and format of ethnic/racial classifications of the most recent British and American decennial censuses have been modified in ways that increase the flexibility of response permitted, and therefore the complexity that is reflected. The modifications have been informed by community consultation in an effort to ensure that individuals identify with the options available. The census conducted in the USA in 2000 introduced additional categories, permitted multiple box-ticking and free-text responses to reflect

identities, while the 2001 British census offered an extended range of options compared with the 1991 version (Department of Health) and asked a question about religion for the first time in England, Wales and Scotland. Debates as to whose interests are served by such changes continue (Ifekwunigwe 2002) and, in large measure, the answer to this depends on how the resulting data are presented, analysed and used to inform future policy and research.

While comparability with previous sweeps of a survey is one consideration in modifying classifications of ethnicity, the broader question as to whether, for instance, American and British census questions are measuring the same quality has yet to attract widespread debate. Attempts to describe how the issues in disentangling and analysing race, ethnicity and social class in the USA differ compared with the UK (Johnson 1996) have suggested that they have different meanings on either side of the Atlantic. In the USA, race has been collected as a census variable since 1790 (Krieger et al. 1993) and is entrenched as an officially recognised social division, whereas measures of social class are far less developed in national vital statistics when compared with the UK. Given the particular role of slavery in American history, ethnicity or racial group has been a frequent proxy for socio-economic position (Smith 2000). An ethnic/racial group question was introduced in the UK census only in 1991, whereas occupation-based classification has been routinely collected and reported for at least a century. These differing practices in gathering statistics are just part of the wider contrasts in the interlinking ideologies and material effects of racism, social and economic inequalities between the UK and USA (Smith 2000) and a case in point of Britain and America being divided by a common language. Detailing some of the historical and economic specificities of ethnicity, socio-economic position and racism (Nazroo 2003) shows the complexities of describing patterns and effects in a single culture, let alone across two or more. Anthropologists debate whether it is possible to discuss kinship categories across cultures—does being a sister, for instance, mean the same thing in Maori, Croatian and Ibo cultures? Cross-cultural comparisons are treated with great caution (Parkin 1997). The introduction of ethnicity as a variable in epidemiological research has shown the specifics of how socio-economic class works as a measure of material wealth and cultural capital in different ethnic groups (Smith et al. 2001).

The reluctance to generalise beyond the local is not shown by health researchers who seem to believe that a definition of ethnicity exists that will permit comparisons between cultures and through time. The development of vocabulary to document and tackle health inequalities between ethnic groups is hoped for, despite the context of the British NHS which is 'not yet versatile or flexible enough to provide an equitable service' (Bhopal 2001). Future developments are anticipated to produce solutions (McKenney and Bennett 1994) to overcome the inconsistencies of current terminology and to produce findings that will be consistent (Krieger et al. 1993) and even comparable through time and across cultures (Bhopal and Donaldson 1998). Echoing the warning that generalisations should be made only 'with great caution' (Senior and Bhopal 1994), the enormous complexities and variations in ethnicity make such comparisons fraught with difficulty. The prospects for cross-cultural consensus on terminology seem remote given the tetchy tone of exchanges on the interpretation of terms within (Smith 2002) and between cultures (Fustinoni and Biller 2000; Saposnik 2000; Bhui and Bugra 2001).

Rendering Ethnicity Non-universal

Inadequacies in the 'measurement of ethnicity' have been nominated as the 'main limitation' hampering 'investigations into ethnic inequalities in health and how they might be structured through social and economic disadvantage' (Nazroo 2003). The urgent need to address injustice and its consequences is important for building an inclusive society as well as constituting a public health problem (Zenilman et al. 2001).

This paper began by asking whether ethnicity can be conceptualised in a fashion that is meaningful for research, that reflects people's lived experience and avoids the dangers of reifying difference, yet is flexible enough to remain relevant as populations shift. Researchers into ethnicity and health cannot avoid the necessity of tightening up definitions of racialised and/or ethnic groups. The clear specificity of the dimension/s of ethnicity under discussion or investigation is essential and, where possible, the hypothesised link with specific health outcomes to avoid the accusation of practising 'black box epidemiology' (Senior and Bhopal 1994; Bhopal 1997). Whether definitional discipline makes comparisons possible is another matter given the time and cultural specificity of group and individual ethnic identities. A universal conceptualisation of ethnicity may be a theoretical concept that is impossible to operationalise. Pre-survey research undertaken with British minority ethnic groups shows how specific conditions and relations should inform not only categories employed but also methods of sampling, data collection, topic coverage and analysis (Elam *et al.* 2001).

Assuming that the pressure to define ethnicity in detail in empirical study is maintained and that ethnicity's relationship with other variables (such as socio-economic group, gender, religion, family structure) is similarly detailed, then the non-universality of ethnicity will become difficult to ignore. Ethnicity is culturally and historically specific in two related ways: first, in the sense that its recognition and measurement by the scientific community has changed over time and currently varies between places; and, second, in the way that ethnicity informs individual and group identities. The ways that researchers conceive of social phenomena are a reflection of wider social processes and as such this discussion is part of a larger debate about difference and identity. Researchers express an obligation to establish good practice in conceptualising the social world, avoiding, where possible the self-serving and oppressive ideologies of their forebears. It is this progressive impulse that has informed the calls for greater precision and detail in defining ethnicity. The building up of a detailed picture of ethnic identities in their appropriate social and economic context is likely to make it difficult to presume the universal nature of a phenomenon defined in restricted terms. Recognition of the redundancy of the use of ethnicity as a coverall term that apparently describes a universal phenomenon is likely to promote good research and contribute to ameliorating inequities in health and health care.

GLOSSARY

Socio-economic group refers to the occupation-based class of a person in employment and correlates closely with level of wealth and income. Since occupation is easier to ascertain than income or wealth, it is a widely used proxy measure.

Racialisation refers to the social process which creates the conditions for groups to be recognised as races and which makes racism possible. Racialisation involves the negative evaluation of particular somatic features and the assignation of individuals showing those features to a general category which is seen to reproduce itself biologically. The way in which a particular group is constructed as a race or as a racialised group is a matter for historical investigation (Miles 1989).

Cultural capital refers to the advantages that accrue to those in more privileged social classes but that cannot be measured in terms of material advantage. Access to higher education, knowledge of music, fine arts and contacts among the professional classes do not themselves raise a person's level of wealth, but they may contribute to a person's employability and hence their level of wealth.

REFERENCES

Ahdieh L. and Hahn R.A. (1996) Use of the terms 'Race', 'Ethnicity', and 'National Origins': a review of articles in the *American Journal of Public Health*, 1980–1989. *Ethnicity & Health*, *1*(1), 95–98.

Ahmad W. (ed.) (1993) '*Race' and Health in Contemporary Britain*. Buckingham: Open University Press.

Anderson M. and Fienberg S.E. (2000) Race and ethnicity and the controversy over the US Census. *Current Sociology*, *48*(3), 87–110.

Anonymous (1999) Letters to the editor. *American Journal of Public Health*, *89*(5), 782.

Aspinall P.J. (1997) The conceptual basis of ethnic group terminology and classifications. *Social Science and Medicine*, *45*(5), 689–98.

Aspinall P.J. (1998a) Describing the 'white' ethnic group and its composition in medical research. *Social Science and Medicine*, *47*(11), 1797–808.

Aspinall P.J. (1998b) Theories of race, ethnicity and culture. Electronic letter. *British Medical Journal*, *317*, 1381–84.

Aspinall P.J. (2001) Operationalising the collection of ethnicity data in studies of the sociology of health and illness. *Sociology of Health and Illness*, *23*(6), 829–62.

Association of MultiEthnic Americans Website. http://www.ameasite.org/census/, accessed 9 May 2003.

Bennett T. (1997) Racial and ethnic classification: two steps forward and one step back? *Public Health Reports*, *112*, 477–80.

Bhopal R. (1997) Is research into ethnicity and health racist, unsound or important science? *British Medical Journal*, *314*, 1751–56.

Bhopal R. (1998) Spectre of racism in health and health care: lessons from history and the United States. *British Medical Journal*, 322: 1503–1504.

Bhopal R. (2001) Racism in medicine. Editorial. *British Medical Journal*, *316*, 1970–73.

Bhopal R. and Donaldson L. (1998) White, European, western, Caucasian, or what? Inappropriate labelling in research on race, ethnicity and health. *American Journal of Public Health*, *88*(9), 1303–7.

Bhopal R., Kohli H. and Rankin J. (1997) Editors' practice and views on terminology in ethnicity and health research. *Ethnicity & Health*, *2*(3), 223–27.

Bhopal R., Phillimore P. and Kohli H.S. (1991) Inappropriate use of the term 'Asian': an obstacle to ethnicity and health research. *Journal of Public Health Medicine*, *13*(4), 244–46.

Bhopal R., Unwin N., White M., Yallop J., Walker L., Alberti K., Harland J., Patel S., Ahmad N., Turner C., Watson B., Kaur D., Kulkarni A., Laker M. and Tavridou A. (1999) Heterogeneity of coronary heart disease risk factors in Indian, Pakistani, Bangladeshi and European origin populations: cross-sectional study. *British Medical Journal*, *319*(7204), 215–20.

Bhui K. and Bhugra D. (2001) Methodological rigour in cross-cultural research. *The British Journal of Psychiatry*, *179*, 269.

Bowler I. (1993) 'They're not the same as us': midwives' stereotypes of South Asian descent maternity patients. *Sociology of Health and Illness*, *2*, 157–78.

Bradby H. (1995) Ethnicity: not a black and white issue. A research note. *Sociology of Health and Illness*, *17*(3), 405–17.

British Medical Journal (1996) Style matters: ethnicity, race and culture: guidelines for research, audit and publication. *British Medical Journal*, *312*(7038), 1094.

Elam G., McMunn A. and Nazroo J. (2001) *Feasibility Study for Health Surveys among Black African People Living in England*. Final report for the Department of Health. London: Joint Health Surveys Unit and National Centre for Social Research. http://www.doh.gov.uk/pdfs/healthrptfeasibafricansurvey.pdf, accessed 5 May 2003.

Fullilove M.T. (1998) Comment: abandoning 'race' as a variable in public health research—an idea whose time has come. *American Journal of Public Health*, *88*(9), 1297–98.

Fustinoni O. and Biller J. (2000) Ethnicity and stroke. Beware of the fallacies. *Stroke*, *31*, 1031–15.

Hilton C. (1996) For debate: collecting ethnic group data for inpatients: is it useful? *British Medical Journal*, *313*, 923–25.

Ifekwunigwe J.O. (2001) 'Re-membering "race": on gender, "mixed race" and family in the English–African Diaspora', in Parker D. and Song M. (eds.) *Rethinking 'Mixed Race'*. London: Pluto Press. 42–64.

Ifekwunigwe J.O. (2002) (An)Other English city. Multiethnicities, (post)modern moments and strategic identifications. *Ethnicities*, *2*(3), 321–48.

Johnson M. (1996) Links need to be maintained with census definitions. Letter. *British Medical Journal*, *313*, 426.

Karlsen S. and Nazroo J. (2002) Relation between racial discrimination, social class, and health among ethnic minority groups. *American Journal of Public Health*, *92*(4), 624–31.

Krieger N., Avery B., Rowley D., Phillips M. and Herman A. (1993) Racism, sexism, and social class: implications for studies of health, disease, and well-being. *American Journal of Preventive Medicine*, *9*(6), 82–122.

Lauderdale D. and Goldberg J. (1996) The expanded racial and ethnic codes in the Medicare data files: their completeness of coverage and accuracy. *American Journal of Public Health*, *86*(5), 712–16.

Low N., Sterne J. and Barlow D. (2001) Inequalities in rates of gonorrhoea and chlamydia between black ethnic groups in southeast London: cross sectional study. *Sexually Transmitted Infections*, *77*, 15–20.

McAuley J., De Souza L., Sharma V., Robinson I., Main C. and Frank A. (1996) Self-defined ethnicity is unhelpful. Letter. *British Medical Journal*, *313*, 425–26.

McKenney N. and Bennett C. (1994) Issues regarding data on race and ethnicity: the Census Bureau experience. *Public Health Reports*, *109*(1), 16–25.

McKenzie K. and Crowcroft N. (1996) Describing race, ethnicity, and culture in medical research. *British Medical Journal*, *312*, 1054.

Miles R. (1989) *Racism*. London: Routledge.

Modood T., Berthoud R. and Nazroo J. (2002) 'Race', racism and ethnicity: a response to Ken Smith. *Sociology*, *36*(2), 419–27.

Nazroo J.Y. (1997) *The Health of Britain's Ethnic Minorities: Findings from a National Survey*. London: Policy Studies Institute.

Nazroo J.Y. (1998) Genetic, cultural or socio-economic vulnerability? Expanding ethnic inequalities in health. *Sociology of Health and Illness*, *20*, 714–34.

Nazroo J.Y. (2003) The structuring of ethnic inequalities in health: economic position, racial discrimination and racism. *American Journal of Public Health*, *93*(2), 277–85.

Office of Management and Budget (OMB), Office of Information and Regulatory Affairs, Statistical Policy Directive No. 15, Race and Ethnic Standards for Federal Statistics and Administrative Reporting and Revision to Statistical Policy Directive No. 15. http://www.whitehouse.gov/omb/fedreg/directive_15.html, accessed 12 May 2003 and http://www.whitehouse.gov/omb/fedreg/race-ethnicity.html, accessed 12 May 2003.

Parkin, R. (1997) *Kinship. An Introduction to Basic Concepts*. Oxford: Blackwell.

Pfeffer, N. (1998) Theories of race, ethnicity and culture. *British Medical Journal*, *317*, 1381–84.

Rankin J. and Bhopal R. (1999) Current census categories are not a good match for identity. Letter. *British Medical Journal*, *318*, 1696.

Saposnik G. (2000) Ethnicity in stroke: practical implications. Letter. *Stroke*, *31*, 2732.

Senior P. and Bhopal R. (1994) Ethnicity as a variable in epidemiological research. *British Medical Journal*, *309*, 327–30.

Smaje C. (1995) *Health 'Race' and Ethnicity: Making Sense of the Evidence*. London: The King's Fund.

Smith G.D. (2000) Learning to live with complexity: ethnicity, socioeconomic position, and health in Britain and the United States. *American Journal of Public Health*, *90*(11), 1694–98.

Smith G.D., Charlsey K., Lambert H., Paul S., Fenton S. and Ahmad W. (2001) 'Ethnicity, health and the meaning of socio-economic position', in Graham H. (ed.) *Understanding Health Inequalities*. Buckingham: Open University Press. 25–37.

Smith K. (2002) Some critical observations on the use of the concept of 'ethnicity' in Modood *et al.*, Ethnic Minorities in Britain. *Sociology*, *36*(2), 399–417.

Walker S. (1998) Theories of race, ethnicity and culture. Electronic letter. *British Medical Journal*, *317*, 1381–84.

Wild S. and McKeigue P. (1997) Cross sectional analysis of mortality by country of birth in England and Wales 1970–9. *British Medical Journal*, *314*, 705–10.

Williams D. (2002) Racial/ethnic variations in women's health: the social embeddedness of health. *American Journal of Public Health*, *92*(4), 588–97.

Williams R., Bhopal R. and Hunt K. (1993) Health of a Punjabi ethnic minority in Glasgow: a comparison with the general population. *Journal of Epidemiology and Community Health*, *2*, 96–102.

Zenilmann J., Shahmanesh M. and Winter A. (2001) Ethnicity and STIs: more than black and white. Editorial. *Sexually Transmitted Infections*, *77*, 2–3.