original article

Ethnicity & Health

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Europe and in particular, the United Kingdom (UK), are becoming increasingly multicultural and ethnically-diverse regions. For this reason, the role of ethnicity in health has become salient as ethnic inequalities in health have become apparent. The use of ethnicity in health research has its origins in theories of 'race', which focus on physical and anthropological characteristics (Fenton, 2004), with the idea that racial and biological variations underpin the "natural" differences in health between ethnic groups (Karlsen, 2004). Ethnicity, however, emphasises differentiation between groups in terms of their religious, ancestral, cultural and social backgrounds, and with the belief that ethnic groups are bound shared attitudes, behaviours together by experiences. For this article, this definition will be used; however there are numerous ways to define ethnicity depending on one's focus of interest and opinion.

Ethnicity and disease

There is much evidence indicating that ethnicity is associated with health (Nazroo, 2003). particular diseases are higher in certain ethnic groups than others. For example, it has been repeatedly shown that South Asian people in the UK (people originating from the Indian sub-continent) suffer from elevated rates of diabetes and coronary heart disease (CHD). In contrast, despite a high prevalence of diabetes and hypertension, Afro-Caribbeans in the UK show low rates of CHD, however, they suffer an elevated vulnerability to stroke. Cancer prevalence in ethnic minorities has not been widely examined but it has been suggested that high prevalence of CHD in South Asians may be the result of low rates of competing illnesses (Bhopal, 2002), such as cancers. In terms of self-reported health, ethnic minorities in the UK (except Chinese groups) are consistently more likely to report their own health as poor compared with the majority (Natarajan, 2006).

Possible explanations

There are a number of possible explanations for these ethnic differences in health.



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a) Genetic and biological variations

There are many genetic variations between ethnic groups, for example, the polymorphism of factor VII, an independent risk factor for CHD, is more prevalent in Indian compared with other ethnic groups (Quek et al, 2006; Saha et al, 1995). Biological precursors seem to account for the high vulnerability to diabetes and insulin resistance seen in South Asians and Afro-Caribbeans (Chaturvedi, 2001). However, the evidence focusing on biological and genetic variations by ethnic group does not account fully for differences in disease rates between Other factors must be considered and groups. adequate adjustments made before it is simply assumed that ethnic differences have a biological basis.

b) The importance of socioeconomic differences

To understand ethnic inequalities in health, the structural qualities of ethnicity, such as socioeconomic status (SES) and discrimination, need to be investigated (Karlsen & Nazroo, 2002). These are integral to the lives of ethnic minorities and have a large impact on health.

It is essential that socioeconomic factors are taken into account in ethnic group comparisons of disease rates because of the socioeconomic patterns between groups in the UK, with ethnic minorities generally clustered in the lower social groups

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(Modood et al, 1997). Therefore, these SES factors must be considered, to prevent excessive disease rates being attributed to 'ethnic' or biological differences, without full assessment of the socioeconomic contribution. It has been suggested that the CHD differentials between white and South Asian groups may not reflect true 'ethnic group' differences. Work from the Fourth National Survey of Ethnic Minorities in Britain has shown that once adjustments were made for SES factors, the ethnic group difference was eradicated (Nazroo, 2001). This implicated SES as a key mediating factor in CHD risk variations, as demonstrated in the heterogeneity of CHD risk between the South Asian subgroups, with Bangladeshis, who are the most socially disadvantaged, suffering the highest CHD rates, and Indians showing similar SES and CHD risks to UK whites. Socioeconomic factors also affect health behaviours, with people in lower social groups being more likely to participate in health-compromising behaviours, such as smoking, high fat diets and lower rates of physical activity. Therefore, it is possible that some of the SES influence is mediated through health behaviours.

c) Behavioural differences

The impact of behavioural and lifestyle choices play a major role in the development of disease. For example, it is well established that South Asian people in the UK have particularly low rates of physical activity, in particular in Muslim groups and women (Fischbacher et al, 2004). This is likely to promote CHD risk through dyslipidaemia, hyperglycaemia, and other atherogenic processes. Smoking rates vary widely between South Asian subgroups; Bangladeshi men have particularly high rates and Indian men have very low rates of smoking compared with the general population (Wardle, 2006). These differences have a largely religious and cultural basis, and therefore SES factors are likely to play a less prominent role in such variations compared with smoking differentials observed within the white population. There are fewe behavioural differences between Afro-Caribbeans and whites in the UK, with similar levels of physical activity (Stamatakis, 2006) and smoking (Wardle, Alcohol consumption, fruit and vegetable 2006). intake, and dietary fat consumption were more favourable in ethnic minorities compared with the general population according to the recent Health Survey for England, The Health of Minority Ethnic Groups 2004 report (Becker et al, 2006; Craig et al, 2006).

d) Other psychological and social variations

Another possibility for ethnic differences in health is likely to be variations in exposure to non-behavioural psychological and social factors, which relate to ill health, and in particular to heart disease. Psychosocial factors, such as depression, work stress and social support, have been shown to be associated with CHD risk in UK white groups (Rozanski et al, 1999) but such psychosocial CHD risk factors have not been adequately examined in other ethnic groups. psychosocial experience of ethnic minorities in the UK differs from the ethnic majority, for example, with greater exposure to racial discrimination (Karlsen & Nazroo, 2002). This discrimination affects many aspects of life and culminates in the socioeconomic positioning of most ethnic minorities in the more socially deprived groups. The few studies that have investigated psychosocial profiles in UK South Asians have had mixed findings, with some suggestion of elevated psychosocial risk profiles (Hemingway et al, 2001; Williams et al, in press). Such psychosocial disadvantage has been associated with increased risk of ill health, in the form of poor self-reported health (Nazroo, 1997) and increased CHD risk (Karlsen & Nazroo, 2002; Rosengren et al, 2004). It is important that comprehensive psychosocial profiles are taken into account in ethnic minority groups beyond the standard psychosocial risk factors explored in white populations.

Each of these explanations is likely to provide some contribution to the ethnic equalities in health that have been observed.

Importance of cross-cultural validity

Ethnicity-related studies must demonstrate crosscultural validity of their measures (Bhopal et al, 2004). It is important that the established questionnaires are validated in ethnic minorities, as it cannot be assumed that different cultural groups interpret items in the same way. It has also been suggested that description of symptoms and symptom presentation may differ between cultural groups which may affect diagnosis and treatment. For example, studies have shown that there are some differences in the description of depressive symptoms between whites and South Asians (Nazroo & O'Connor, 2002), and that the Rose questionnaire may be less reliable as a marker for definite angina in South Asian groups than whites (Fischbacher et al, 2001). Therefore, reliable and valid measurement remains one of the key challenges in this area of research.

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Future research

Given this great complexity and the various competing explanations of the observed association between ethnicity and health, there is considerable scope for future research in this area for health psychologists. Future research focusing on ethnicity and health must fully evaluate the influence of the various SES indicators on health differentials across ethnic groups, to more accurately identify behavioural and other psychological mediators/moderators. Work should also measure life course elements of psychosocial exposure to try to understand the role of migration and the cumulative impact of psychosocial disadvantage across the lifespan (Nazroo, 2003). There are many issues relating to acculturation that need further attention. Acculturation is the modification of one's culture and behaviours as a result of contact with a different culture. Researchers must be flexible and to acculturation differences individuals and generations, and aware of the way this is likely to affect behaviour patterns and therefore influence health. This and other work will allow us to improve our understanding of this complex issue and help inform policy that aims to reduce health inequalities related to ethnicity. In particular, health psychology will have an important role in identifying and changing the modifiable behavioural and other psychosocial determinants of health that operate between ethnicity and health.

References

- Becker, E., Hills, A., & Erens, B. (2006). Alcohol consumption. In: K. Sproston & J. Mindell (Eds.). *Health Survey for England 2004. Volume 1: The health of minority ethnic groups.*London: The Information Centre.
- Bhopal, R., Vettini, A., Hunt, S., Wiebe, S., Hanna, L., & Amos, A. (2004). Review of prevalence data in, and evaluation of methods for cross cultural adaptation of, UK surveys on tobacco and alcohol in ethnic minority groups. *British Medical Journal*, 328, 76-80A.
- Chaturvedi, N. (2003). Ethnic differences in cardiovascular disease. *Heart*, 89, 681-686.
- Craig, R., Doyle, M. & Jotangia, D. (2006). Eating habits. In: K. Sproston & J. Mindell (Eds.). *Health Survey for England 2004. Volume 1: The health of minority ethnic groups.* London: The Information Centre.
- Fenton, S. (2004). Ethnicity. Malden, M.A: Blackwell Publishing.
 Fischbacher, C. M., Bhopal, R., Unwin, N., White, M., & Alberti, K. G. M. M. (2001). The performance of the Rose angina questionnaire in South Asian and European origin populations: a comparative study in Newcastle, UK. International Journal of Epidemiology, 30, 1009-1016.
- Fischbacher, C. M., Hunt, S., & Alexander, L. (2004). How physically active are South Asians in the United Kingdom? A literature review. *Journal of Public Health*, 26, 250-258.

- Hemingway, H., Whitty, C. J., Shipley, M., Stansfeld, M. S., Brunner, E., Fuhrer, R. et al. (2001). Psychosocial risk factors for coronary disease in White, South Asian and Afro-Caribbean civil servants: the Whitehall II study. *Ethnicity and Disease*, 11, 391-400.
- Karlsen, S. (2004). 'Black like Beckham'? Moving beyond definitions of ethnicity based on skin colour and ancestry. *Ethnicity and Health*, 9, 107-137.
- Karlsen, S. & Nazroo, J. Y. (2002). Agency and structure: the impact of ethnic identity and racism on the health of ethnic minority people. *Sociology of Health & Illness*, 24, 1-20.
- Karlsen, S. & Nazroo, J. Y. (2002). Relation between racial discrimination, social class, and health among ethnic minority groups. *American Journal of Public Health*, *92*, 624-631.
- Modood, T, Berthoud, R., Lakey, J., Nazroo, J., Smith, P., Virdee, S., et al. (1997). Ethnic minorities in Britain: Diversity and Disadvantage. London: Policy Studies Institute.
- Nazroo, J. Y. (1997). *The health of Britain's ethnic minorities*. London: Policy Studies Institute.
- Nazroo, J. Y. (2001). South Asian people and heart disease: an assessment of the importance of socioeconomic position. *Ethnicity and Disease*, 11, 401-411.
- Nazroo, J. Y. (2003). The structuring of ethnic inequalities in health: Economic position, racial discrimination, and racism. American Journal of Public Health, 93, 277-284.
- Nazroo, J. & O'Connor, W. (2002). Idioms of mental distress. In: W. O'Connor & J. Nazroo (Eds.). Ethnic difference s in the context and experience of psychiatric illness: A qualitative study. London: TSO.
- Natarajan, L. (2006). Self-reported health and psychosocial wellbeing. In: K. Sproston & J. Mindell (Eds.). *Health Survey for England 2004. Volume 1: The health of minority ethnic groups.* London: The Information Centre.
- Quek, S. C., Low, P. S., Saha, N., & Heng, C. K. (2006). The effects of three factor VII polymorphisms on factor VII coagulant levels in healthy Singaporean Chinese, Malay and Indian newborns. *Annals of Human Genetics*, 70, 951-957.
- Rosengren, A., Hawken, S., Ounpuu, S., Sliwa, K., Zubaid, M., Almahmeed, W. A. et al. (2004). Association of psychosocial risk factors with risk of acute myocardial infarction in 11119 cases and 13648 controls from 52 countries (the INTERHEART study): case-control study. *Lancet*, 364, 953-962
- Rozanski, A., Blumenthal, J. A., & Kaplan, J. (1999). Impact of psychological factors on the pathogenesis of cardiovascular disease and implications for therapy. *Circulation*, 99, 2192-2217.
- Saha, N., Heng, C. K., Mozoomdar, B. P., Reuben, E. M., Soh, H. T., Low, P. S. et al. (1995). Racial variation of factor VII activity and antigen levels and their correlates in healthy Chinese and Indians at low and high risk for coronary artery disease. *Atherosclerosis*, 117, 33-42.
- Stamatakis, E. (2006). Physical activity. In: K. Sproston & J. Mindell (Eds.). *Health Survey for England 2004. Volume 1: The health of minority ethnic groups.* London: The Information Centre.
- Wardle, H. (2006). Use of tobacco products. In: K. Sproston & J. Mindell (Eds.). *Health Survey for England 2004. Volume 1: The health of minority ethnic groups.* London: The Information Centre.
- Williams E, Kooner I, Steptoe A, Kooner, J. Psychosocial Factors Related to Cardiovascular Disease Risk in UK Indian Asian Men: A Preliminary Study. *British Journal of Health Psychology* (in press).

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