# The effect of ethnic density on health

**Bécares, L., Stafford, M., & Nazroo, J.**

**2008 European Population Conference**
**Extended Abstract**

Inequalities in health among ethnic groups in the United Kingdom have been extensively documented, with studies on health disparities showing a consistent discrepancy between the health of Bangladeshi, Pakistani and Caribbean people compared to that of White and Chinese people. Studies have found that Caribbean people are more likely than Whites to describe their health as fair, poor or very poor, and that Pakistani and Bangladeshi people, who fare worse than all other ethnic groups, are 50% more likely than White people to report fair, poor, or very poor health. Similar patterns of health disparities have been observed in other health outcomes, including long-standing illness limiting ability to work, heart disease, and hypertension, where ethnic minorities report higher rates of disease than those reported by White people. In some cases, as in diabetes amongst Pakistani and Bangladeshi people, rates of ill health are over five times that of Whites.

Possible explanations of health disparities have been attributed to socio-economic inequalities among ethnic groups. However, after accounting for socio-economic status large differences remain among ethnic groups, providing evidence for the possibility that socio-economic factors are not the sole explanation behind ethnic disparities in health. The impact of socioeconomic disadvantages experienced by ethnic minorities must be studied within a wider framework, encompassing their disadvantaged place in society. More importantly, the explanation of ethnic inequalities in health must take into consideration health-shaping daily experiences of ethnic minorities in the UK, such as events of racial harassment and discrimination experienced by ethnic minority groups.

The existence of interpersonal discrimination in the UK has been clearly established in several studies. For example, Virdee and colleagues (1997) found that 12% of ethnic minority people had experienced racially motivated verbal abuse; 2% reported experiencing racially motivated property damage, and 13% reported experiencing any form of racial harassment, 22% of whom experienced repeated victimisation (5 times or more). Discrimination has been suggested to impact on mental health by leading to affective reactions such as sadness, through shaping an individual's appraisal of the world, by reinforcing secondary status and impacting on one's self esteem, and by internalising negative stereotypes. Several studies have linked experiences of discrimination to poor health in the UK; in a 2002 study, Karlsen and Nazroo found that respondents who reported experiences of verbal abuse were approximately 50% more likely than those who did not report such events to describe their health as fair or poor, and those who reported being physically attacked or having their property vandalized were over 100% more likely than those who did not to report fair or poor health. Segregation has been stated to concentrate poverty, dilapidation, and social problems in ethnic minority neighbourhoods, resulting in under-funded and ineffective institutions in these communities. Wards with high proportions of ethnic minorities have been shown to be more densely populated, with more social housing, lower proportion of households with cars and central heating, and lower proportions of unemployment and individuals in professional and managerial occupations. Reviews of the literature report significant associations between neighbourhood social environment and several health outcomes, including an increased risk of all-cause mortality; low

birthweight; poor self-rated health, limiting long term illness, chronic disease among adults; and detrimental health behaviour.

However, despite the evidence on the deleterious influence that residential segregation has on socioeconomic standing and health, areas with high levels of ethnic concentrations have also been hypothesised to provide its residents with positive attributes. It has been hypothesized that these positive attributes found in areas of greater concentration of ethnic minorities might provide its residents with protective effects on health, through the ethnic density effect. Hypotheses of the ethnic density effect in health research have been coined stipulating that as the size of an ethnic minority group increases, their health complications will decrease. Theoretical frameworks behind the ethnic density effect articulate that positive health outcomes are attributed to the protective and buffering effects that enhanced social cohesion, mutual social support and a stronger sense of community and belongingness provide from the direct or indirect consequences discrimination and racial harassment, as well as from the detrimental effects of low status stigma.

This study aimed to investigate the relationships between residential ethnic density, interpersonal ethnic discrimination and health. Data from the Fourth National Survey on Ethnic Minorities (FNS), a nationally representative sample of 5196 people of Caribbean, Indian/African Asian, Pakistani, and Bangladeshi origin, and 2867 white people living in England and Wales, were analysed to test our hypotheses that: i) ethnic minority people living in areas with a high proportion of co-ethnics will experience less racism and will have better health outcomes than their counterparts living in areas of less ethnic density, and ii) ethnic density will have a buffering effect on the association between racism and health.

Descriptive analyses of the FNS showed Pakistani and Bangladeshi people to be younger and in lower socioeconomic positions than other ethnic groups, and together with people of Caribbean descent, to be living in more deprived areas. White people were highly concentrated in areas of very low ethnic minority density, whereas ethnic minority people were more evenly distributed and more likely to live in areas of higher ethnic concentration. Pakistani and Bangladeshi people were the most concentrated, with over a quarter of their population living in areas of highest own-group density (20% or more). When compared to White people, ethnic minorities tended to report worse overall health, and in the case of Caribbeans, worse psychotic symptomatology. Pakistani and Bangladeshi people faired worse in comparison to all other ethnic groups, being twice as likely as White people to report fair, poor or very poor health. Conversely, they were less likely to report psychotic symptomatology, as opposed to Caribbean people, who were 27% more likely than Whites to report psychotic symptomatology.

Multiple regression analyses, adjusted for age, sex, individual socioeconomic position, area deprivation, and corrected for the hierarchical nature of the data yielded that, as hypothesised, ethnic minorities living in areas of greater ethnic density experienced fewer events of racism than their counterparts in less ethnically dense areas. Experienced racism was associated with greater reporting of poor self-rated health, limiting long-term illness and psychotic symptoms. The moderating effect of ethnic density on the detrimental impact of racism on health was analysed by conducting a logistic regression that accounted for age, gender, individual socioeconomic status, and area deprivation.

Findings raise several questions for future research, including examining whether the relationship between ethnic density and health is a linear one, or whether there is a ‘threshold’ effect beyond which increasing numbers makes little difference. Further, a

detailed exploration of the pathways by which ethnic density impacts on the health of ethnic minorities needs to be conducted. Finally, ethnic density performed differently across health outcomes and ethnic groups, and future analyses need to explore the reasons behind these phenomena. These questions will be answered in upcoming work funded by an ESRC-UPTAP project grant.