SELF-RATED HEALTH AND AREA DEPRIVATION:
EXPLORING A DIFFERENTIAL ASSOCIATION AMONG
WHITE BRITISH AND ETHNIC MINORITY PEOPLE IN
ENGLAND

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Introduction Studies that have examined interactions between individual and contextual characteristics have revealed variations in the social gradient in health depending on area-level deprivation, reporting increased health inequality in less deprived areas. The present study examines whether similar variations are found between the environment and other individual characteristics, exploring whether the link between area deprivation and self-rated health (SRH) depends on an individual’s ethnicity.

Methods Data from the 2007 Citizenship Survey were geocoded to the 2001 UK census, and random effects multi-level logistic regression models were conducted to examine: whether the association between area deprivation and poor SRH differs for ethnic minority groups, as compared to white British people; and whether possible differential associations are mediated by neighbourhood characteristics.

Results A detrimental association was found between area deprivation and poor SRH across ethnic groups, but effect sizes were found to be larger for white British than for ethnic minority people. Interaction between area deprivation and ethnicity showed the detrimental association between area deprivation and SRH to be of greater magnitude for white British than for ethnic minority people (Coefficient (standard error) relative to the white British group for Indian: −0.07 (0.03); Pakistani −0.07 (0.05); Bangladeshi: −0.06 (0.08); Black Caribbean: −0.15 (0.04); and Black African respondents: −0.10 (0.06). P-value for Wald test of interaction between area deprivation and ethnicity: 0.0101). This differential association was not found to be mediated by neighbourhood characteristics.

Conclusion The association between area deprivation and SRH was found to be less strong for ethnic minority than for white British people, but this was not mediated by neighbourhood characteristics. Other hypothesised explanations include a higher degree of deprivation in ethnic minority neighbourhoods not captured by the Indices of Multiple Deprivation; a possible ceiling effect of poor health constraining ethnic minority people’s change in health; and habituation effects due to earlier exposure and elevated levels of exposure to poverty per part of ethnic minority people.