

**Background** Poor mental health is more common in deprived communities in the UK. Individual characteristics (employment, financial security, significant life events, social networks) are key proximal determinants of mental health. It is important to examine the upstream effects of the neighbourhood environment on mental health because it may be easier to modify in the context of public health interventions that aim to reduce health inequalities.

**Objective** To identify the influence of the local neighbourhood environment on positive mental health in low income communities in London.

**Methods** Individual-level characteristics were collected by interviewers using structured questionnaires from 4107 adults (aged  $\geq 16$  years) living in 40 of the most deprived neighbourhoods in London (neighbourhoods defined as census lower super output areas (LSOA); ranked in the top 11% of LSOAs in London by Index of Multiple Deprivation). Physical and social characteristics of the neighbourhoods were captured using a fieldworker-completed environmental audit tool.

**Statistics** Multiple imputation to account for missing individual-level data; multilevel modelling to examine the individual and neighbourhood determinants of positive mental health (the Hope Scale – higher value indicates positive mental health).

**Results** Preliminary results indicate (after adjusting for socio-demographic characteristics): individuals who find it more difficult to manage on their household income have lower Hope Scale scores (test for trend  $p=0.001$ ); unemployed individuals had lower Hope Scale scores than those in employment or education (coefficient =  $-4.2$ ;  $p<0.001$ ); individuals who spoke to friends and neighbours less often had lower Hope Scale scores; residents generally less satisfied with their neighbourhood had lower Hope Scale scores (test for trend  $p=0.01$ ). After adjusting for individual characteristics 3% of the residual variance in the Hope Scale was attributable to neighbourhood differences. The intra-cluster correlation coefficient was 0.09. No specific aspects of the neighbourhood environment were associated with positive mental health (green space, land use, population density and turnover, crime and incivilities). Further results will be presented, including effects of additional neighbourhood characteristics and interactions between individual and neighbourhood characteristics.

**Conclusions** Preliminary analyses indicate no neighbourhood effects on positive mental health in low income communities in London; this may be due to the limited clustering of positive mental health in the sampled communities. Further work is needed to understand the complex causal pathways by which neighbourhood environments and other structural determinants may affect mental health in deprived communities.

## Social and environmental determinants

OP13

### DETERMINANTS OF MENTAL HEALTH AND WELLBEING IN LOW INCOME COMMUNITIES: A MULTILEVEL APPROACH EXAMINING INDIVIDUAL AND NEIGHBOURHOOD CHARACTERISTICS

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