Background Geographic inequalities in health are widely discussed, with an English North-South divide a popular notion. Data indicate the North-South divide in all cause mortality has persisted, even widening in recent years. Given the impact of cardiovascular disease (CVD) mortality on health inequalities, we aimed to assess the extent of a salient North-South divide in risk factors for CVD, controlling for markers of socioeconomic position (SEP).

Methods We conducted a cross-sectional analysis using the 2006 Health Survey for England using respondents aged 16 years and over. We assessed the population means of systolic blood pressure, total cholesterol, body mass index (BMI) and smoking prevalence. We built nested regression models (all linear regression except for total cholesterol, body mass index (BMI) and smoking prevalence. Over. We assessed the population means of systolic blood pressure, total cholesterol, body mass index (BMI) and smoking prevalence. We built nested regression models (all linear regression except for total cholesterol, body mass index (BMI) and smoking prevalence. Over. We assessed the population means of systolic blood pressure, total cholesterol, body mass index (BMI) and smoking prevalence. We built nested regression models (all linear regression except for total cholesterol, body mass index (BMI) and smoking prevalence.

Results Increasing spatial isolation of the poor tends to be associated with higher mortality rates, with an interaction between income and spatial isolation. There is no much difference in mortality rates among the poorest districts in terms of spatial isolation. However, in the richest districts, districts where the poor are spatially isolated have the highest mortality rates, whereas districts where the poor are not isolated have the lowest mortality rates.

Conclusion As cities in the developing world get richer, there is a risk that this leads to increasing spatial socioeconomic segregation of the poor within those cities. The results from this study suggests that the spatial dimension of poverty within cities may be just as important to health as poverty levels.

The North-South divide in systolic blood pressure was attributed to markers of SEP; both systolic blood pressure and BMI differences were attenuated using multiple membership multilevel Poisson regression models to take account of the multilevel (districts within cities) and spatial nature of the data.

Results Increasing spatial isolation of the poor tends to be associated with higher mortality rates, with an interaction between income and spatial isolation. There is no much difference in mortality rates among the poorest districts in terms of spatial isolation. However, in the richest districts, districts where the poor are spatially isolated have the highest mortality rates, whereas districts where the poor are not isolated have the lowest mortality rates.

Conclusion As cities in the developing world get richer, there is a risk that this leads to increasing spatial socioeconomic segregation of the poor within those cities. The results from this study suggests that the spatial dimension of poverty within cities may be just as important to health as poverty levels.

Public Health Interventions: Area and Weight Management

FROM TRIAL TO POPULATION: EFFECT OF A WEIGHT MANAGEMENT INTERVENTION ON BODY MASS INDEX WHEN SCALED UP

Smoking is a major factor behind morbidity and mortality. In line with work from different settings, patterns in smoking can be explained through adverse, cross-sectional patterns of SEP. Addressing underlying poverty and disadvantage may be required to fully tackle smoking inequalities. Using a suite of measures designed to address different constructs of SEP, although cross-sectional, we find excesses in blood pressure and BMI in the North of England. These differences may, in part, explain previously found differences in mortality. If we are to understand, and therefore reduce, geographic inequalities, current measures of SEP may require improvement, for example accounting for aspects of the life-course.
Conclusion Clinically significant BMI changes, similar to those achieved under research conditions, may be replicable in service delivery settings for children of all socio-demographic groups analysed. However, at the population level, scaled up programmes may work better for some groups than others. Public health implications of these results for health inequalities will be discussed.

OP06 WELL LONDON: RESULTS OF A CLUSTER-RANDOMISED TRIAL OF A COMMUNITY DEVELOPMENT APPROACH TO IMPROVING HEALTH BEHAVIOURS AND MENTAL WELLBEING IN DEPRIVED INNER-CITY NEIGHBOURHOODS

doi:10.1136/jech-2012-201753.006

G Phillips, R Hayes, C Bottomley, M Petticrew, P Watts, K Lock, A Draper, D Moore, E Schmidt, P Tobi, S Luis, G Yu, G Barrow-Guevara, A Renton. Institute for Health and Human Development, University of East London, London, UK; Faculty of Epidemiology and Population Health, London School of Hygiene and Tropical Medicine (LSHTM), London, UK; Faculty of Public Health and Policy, LSHTM, London, UK; Department of Psychology, University of Westminster, London, UK; Department of Human and Health Sciences, University of Westminster, London, UK; Institute for Research on Child Development, University of East London, London, UK

Background Few public health interventions combining modification of the social and built environment with individual-level health promotion have been robustly evaluated in the UK. Well London is an assets-based community development programme designed to improve physical activity, healthy eating and mental wellbeing in highly deprived inner-city communities. The programme, delivered between 2007 and 2011, comprised a mix of projects delivering traditional health promotion, community development and changes to the physical neighbourhood environment. The objectives of the study are to: (i) determine the effectiveness of Well London for improving healthy eating, physical activity and mental wellbeing in deprived inner-city communities; (ii) examine the effects in population subgroups linked to health inequalities in the UK.

Methods We used a pair-matched, cluster-randomised trial with 20 control neighbourhoods matched within London boroughs to 20 programme delivery neighbourhoods. The trial outcomes in adult residents (aged ≥16 years) were collected using a structured electronic household survey, administered by fieldworkers to 100 randomly sampled residents in each intervention and control neighbourhood. The main outcome measures were: physical activity: meeting UK Chief Medical Officer-recommended five sessions of 30 minutes moderate intensity activity per week (self-report International Physical Activity Questionnaire); healthy eating: eating at least five portions of fruit/vegetables per day (food frequency questionnaire from the Health Survey for England); and mental wellbeing: abnormal score on 12-item General Health Questionnaire; Warwick Edinburgh Mental Wellbeing Scale score.

Results The baseline survey in 2008 showed that the intervention and control populations are comparable on socio-demographic/ economic characteristics and primary trial outcomes. At baseline, 37% of adults met the five-a-day (healthy eating), 60% met the five-a-week (physical activity), and 18% reported experiencing anxiety or depression. Results from the follow-up survey will be available in April 2012. We will present the effects of Well London on the primary outcomes and subgroup analyses by gender, age, ethnicity and level of education.

Conclusion In a health system where less than 1% of the research budget is spent on primary preventive interventions for non-communicable diseases, robust evidence about the effectiveness and cost-effectiveness of upstream interventions is essential for action on health inequalities and reductions in healthcare spending recommended by the Marmot Review (2010) and the Wanless report (2004).

OP07 WHAT SHAPES PARTICIPATION IN A COMMUNITY-BASED INTERVENTION? EVIDENCE FROM A QUALITATIVE EVALUATION OF THE WELL LONDON PROJECT

doi:10.1136/jech-2012-201753.007

S Jain, A Draper, A Clow, R Lynch, J Derges. Social Work Subject Area, School of Social and Political Science, University of Edinburgh, Edinburgh, UK; Department of Human and Health Sciences, University of Westminster, London, UK; Department of Psychology, University of Westminster, London, UK; Department of Anthropology, UCL, London, UK

Background This paper examines how individual and area-level contextual factors shape participation in a community-based development and health promotion intervention. Well London was a 3-year community development and health promotion programme for improving health behaviours (physical activity and healthy eating) and mental health and wellbeing in areas of high deprivation. The programme aimed to improve individual level health outcomes through a combination of neighbourhood and individual level interventions. Community engagement/participation was a central strategy of these interventions.

Methods A quantitative cluster randomised trial (CRT) was used to evaluate Well London in 20 neighbourhoods defined as Census Lower Super Output Areas (LSOAs). A qualitative study was nested within the trial to examine mechanisms and complexity. This study employed critical case sampling to select three intervention LSOAs that reflected a range of pre-existing community engagement and activities. In-depth semi-structured interviews were conducted with 59 respondents purposively sampled from each of 3 distinct areas. Each area reflected differences in implementation, nature of community life, and pre-existing community activities. Interviews addressed three topics: experiences of area, individual health & wellbeing, and knowledge of and involvement in Well London. Transcripts were coded and thematic analysis undertaken using NVIVO software.

Results Analysis found that area level and individual-level characteristics interacted to shape specific models of individual participation in each area. In an area with a dispersed community, limited pre-existing activities and implementation through formal institutional channels, participation was attributed to respondents to self-motivation and responses to deprivation. In contrast, in the 2nd area, Well London implementation centred on an individual community organizer operating in a geographically close-knit area. Strong community interest and participation was shaped by the ability of this individual to inspire a sense of change. Finally, in an area with a saturation of pre-existing activities, participation in Well London was part of a socially accepted pattern of community involvement. For new people to the area, involvement was viewed as aiding integration while for long-standing residents this was seen as a strategy to contribute to community life.

Conclusion Recent reviews on community participation present evidence of a causal link between participation and positive health outcomes. However, the mechanisms underlying this are not clear. The reasons people participate in Well London are shaped by interactions between individual and area-level factors. This suggests that understanding the link between community participation and health outcomes requires a contextualized analysis of why people participate and the meanings they associate with this.

OP08 EVALUATING THE HEALTH INEQUALITIES IMPACT OF THE NEW DEAL FOR COMMUNITIES INITIATIVE

doi:10.1136/jech-2012-201753.008

J Popay, M Whitehead, H Badland, M Stafford, J Nazroo, C Dickens, E Halliday, S Powillo. Division of Health Research, University of Lancaster, Lancaster, UK; Institute of Health, Psychology and Society, University of Liverpool, Liverpool, UK; Centre for Physical Activity and Nutrition, Auckland University of Technology, Auckland, Australia;