Conclusion: The trial is challenging, both in terms of recruitment, and motivating behaviour change. The presentation will elaborate on the recruitment experience into a trial evaluating the effectiveness of interventions in ethnic minority populations.

**090 UNDER-REPORTING OF TOBACCO USE AMONG BANGLADESHI WOMEN IN ENGLAND; A CROSS-SECTIONAL STUDY**

M Roth, A Atisi-Selmi, H Wardle, J Mindell. Department of Epidemiology and Public Health, University College London, London, UK
doi:10.1136/jech.2009.096735l

**Objective:** To investigate the prevalence of under-reported use of tobacco among Bangladeshi women and the characteristics of this group.

**Design:** Cross-sectional surveys.

**Setting:** Private households in England.

**Participants:** 996 Bangladeshi women aged 16 years and above, 302 with a valid saliva sample and 694 without, in the 1999 and 2004 Health Surveys for England.

**Main Outcome Measure:** Prevalence of under-reported tobacco use (estimated using self-reported tobacco use and cotinine concentration from a saliva sample). Predictors of tobacco use status: self-reported user; cotinine-validated non-user; or under-reporting user.

**Results:** 15% of Bangladeshi women with a saliva sample under-reported their personal tobacco use. Under-reporting users were similar to self-reported users in terms of socio-demographic, socioeconomic, and tobacco-related variables, except for being more likely to report chewing paan (a mixture of betel leaf, lime and areca nut) without tobacco (47% vs. 9%, p < 0.001). Under-reporters significantly differed from cotinine-validated non-users in most respects, including age, birth country, education level, level of spoken English, language of the interview, chewing paan without tobacco, and presence of relatives in the interview. Regression analyses confirmed that under-reporters did not differ significantly from self-reported users regarding age, education level, or exposure to passive smoking. Under-reporters were generally older and less likely to be educated above O level compared with cotinine-validated non-users. Both self-reported users (odds ratio 0.11, 95% CI 0.04 to 0.30) and cotinine-validated non-users (odds ratio 0.42, 95% CI 0.20 to 0.89) were far less likely compared with cotinine-validated non-users. Both self-reported users (odds ratio 0.11, 95% CI 0.04 to 0.30) and cotinine-validated non-users (odds ratio 0.42, 95% CI 0.20 to 0.89) were far less likely compared with cotinine-validated non-users.

**Conclusion:** Apart from preterm delivery, health outcomes of non-poor mothers are improved when they live in more affluent areas. This is not the case for poor mothers, who do not have better self-rated health, and who have higher risk of LBW and LLI in richer areas. These findings may support a psychosocial causal model mediated by area socio-economic density. Further work is needed to test mediating pathways such as social engagement and class discrimination.

**092 SECONDHAND SMOKE EXPOSURE ASSESSED USING SERUM COTININE: ASSOCIATIONS WITH MYOCARDIAL INFARCTION, STROKE AND CARDIOVASCULAR RISK FACTORS IN ADULT MEN AND WOMEN**

BJ Jefferis, GDO Lowe, P Welsh, DA Lawlor, S Ebrahim, SG Wannamethee, BG Cook, PH Whincup. British Regional Heart Study, Department of Primary Care and Population Health, UCL Medical School, London, UK; University of Glasgow, Royal Infirmary, 10 Alexandra Parade, Glasgow, UK; 1MRC CAI Centre, University of Bristol, Oakfield House, Oakfield Grove, Bristol, UK; 2Non-Communicable Diseases Epidemiology Unit, Department of Epidemiology and Population Health, London School of Hygiene and Tropical Medicine, Keppel Street, London, UK; 3Division of Community Health Sciences, St George’s, University of London, Cranmer Terrace, London, UK
doi:10.1136/jech.2009.096735n

**Objectives:** Second-hand smoke (SHS) exposure is associated with elevated CVD risks. Previous studies have implicated altered platelet activity or endothelial dysfunction and changes in circulating levels of HDL, homocysteine and inflammatory markers. However most studies have imprecise exposure measurements and the mechanism remains uncertain. Therefore we examine associations between cotinine, a circulating biochemical marker of SHS exposure, and CVD risk factors, incident CHD and stroke in non-smoking men and women.

**Methods:** 4252 men and 4286 women aged 60–79 years in parallel prospective population-based studies assessed in Primary Care centres in 25 British towns in 1998–2000, with median 7.7 year follow-up for fatal and non-fatal MI (n = 445) and stroke (n = 386). Medical history, health behaviours and demographic data were reported in questionnaires and nurses recorded an ECG, made anthropometric measurements and took fasting blood samples.