## Poster session 1

hip circumference and leisure-time physical activity on all-cause mortality.

Methods We used a prospective population design with approximately 14 years' follow-up and estimated the HRs of all-cause mortality for combinations of physical activity and hip circumference. 3120 men and 4068 women aged 21 to 92 years without pre-existing diagnosis of diabetes, stroke, ischaemic heart disease, or cancer in 1991-1994 and with complete information on the variables of interest were included. They were followed until 2009 in the Danish Civil Registration System, with 1.5% loss to follow-up and

Results Hip circumference was inversely associated with all-cause mortality irrespective of physical activity. However, physical activity seemed to counterbalance some of the adverse health effects of a small hip circumference, with the excess mortality in the lower quartile of hip circumference being reduced by 41% in men (HRdiff: 1.41, 95% CI 1.14 to 1.74) and 40% in women (1.40, 1.14 to 1.71) when comparing physically inactive with the active. These associations were observed after adjustment for waist circumference, height, and weight change in the 6 months before the examination. **Conclusion** A small hip circumference appears hazardous to survival. However, being physically active may counterbalance some of the hazardous effects of a small hip circumference.

P1-489

## PREVALENCE AND DETERMINANTS OF SOLITARY **PULMONARY NODULES DETECTED USING** THORACIC IMAGING TESTS DURING ROUTINE **CLINICAL PRACTICE**

doi:10.1136/jech.2011.142976g.77

<sup>1,2</sup>B Lumbreras, <sup>3</sup>I Gonzalez-Alvarez, <sup>4</sup>J Vilar, <sup>1,2</sup>L A Parker,\* <sup>1,2</sup>M A Pastor, <sup>1</sup>N Gomez-Saez, <sup>3</sup>F Lorente, <sup>4</sup>M L Domingo, <sup>3</sup>L Perez, <sup>3</sup>N Picazo. <sup>1</sup>Department of Public Health, Alicante, Community of Valencia, Spain; <sup>2</sup>CIBERESP (CIBER in Epidemiology and Public Health), Barcelona, Cataluña, Spain; <sup>3</sup>Radiodiagnostic Service, San Juan de Alicante Hospital, Alicante, Community of Valencia, Spain; <sup>4</sup>Radiodiagnostic Service, Dr Pesset Hospital, Valencia, Community of Valencia, Spain

**Introduction** The finding of a solitary pulmonary nodule (SPN) (<3 cm) in routine radiological examination may represent an early stage of lung cancer or a benign lesion, where any further diagnostic procedures may pose an unnecessary risk to patient health. Although SPNs have been described in high risk populations, their frequency in routine clinical care has not been determined.

**Methods** 4681 consecutive patients ≥35 years referred for a thoracic imaging test in two hospitals in the Community of Valencia, Spain in 2010 were included. Six expert radiologists independently classified each imaging report according to the presence or absence of a SPN. Other variables, such as patient demographics diagnosis suspicion, smoking habit, the referral clinical department, type of radiological test performed, and clinical setting were ascertained from medical records. The association between SPNs and patient/ clinical characteristics was assessed with unconditional logistic

Results SPNs were observed in 351 patients (7.5%) and their prevalence varied according to patient characteristics and the referral department, with oncology (15.4%), primary care (10.7%) and pneumology (9.8%), being the highest. After controlling for other factors, SPNs were more common in men (aOR 1.47, 95% CI 1.25 to 1.75), and in smokers (aOR 1.62, 95% CI 1.41 to 1.82).

**Conclusions** At least one in every 13 patients undergoing a thoracic imaging test during routine clinical care will show a SPN. The follow-up of these patients is needed in order to estimate their predictive value for lung cancer, and avoid the initiation of an unnecessary cascade of clinical procedure in benign lesions.

P1-490 | SOCIOECONOMIC INEQUALITIES IN HEIGHT, LEG LENGTH AND TRUNK LENGTH AMONG CHILDREN AGED 6.5 YEARS AND THEIR PARENTS FROM THE REPUBLIC OF BELARUS: EVIDENCE FROM THE PROMOTION OF BREASTFEEDING **INTERVENTION TRIAL (PROBIT)** 

doi:10.1136/jech.2011.142976g.78

<sup>1</sup>R Patel.\* <sup>1,2</sup>D A Lawlor, <sup>3</sup>M S Kramer, <sup>1,2</sup>G D Smith, <sup>4</sup>N Bogdanovich, <sup>4</sup>L Matush, <sup>1,2</sup>R M Martin. <sup>1</sup>School of Social and Community Medicine, University of Bristol, Bristol, UK; <sup>2</sup>MRC Centre for Causal Analyses in Translational Epidemiology (CAiTE), University of Bristol, Bristol, UK; <sup>3</sup>Department of Pediatrics and Department of Epidemiology, Biostatistics and Occupational Health, McGill University Faculty of Medicine, Montreal, Canada; <sup>4</sup>The National Research and Applied Medicine Mother and Child Centre, Minsk, Belarus

Introduction Lower socioeconomic position is associated with shorter stature, in particular shorter leg length, but the magnitude of these associations in non-Western countries has received little

**Aim** To examine socioeconomic differentials in height, leg and trunk length in 6.5 year olds from the Republic of Belarus and compare these to differentials in parental height.

Methods We used data from a cohort of 13889 children born in Belarus between June 1996 and December 1997 to investigate associations of parental educational attainment and highest household occupation with: a) measured child standing height, trunk and leg length at age 6.5 years; and b) the parents' reported standing height. Multivariable linear regression was used to examine associations.

**Results** Children from non-manual households were 1.1 cm (95% CI 0.8 to 1.3 cm) taller than those from manual households. Mothers and fathers from non-manual backgrounds were 0.7 cm (0.5 to 0.8) and 1.8 cm (1.6 to 2.0) taller than those from manual backgrounds, respectively. Associations with higher parental educational attainment were similar. The magnitudes of the associations of socioeconomic position with leg length were similar to those with trunk length. Adjusting for mid-parental height and number of older siblings attenuated children's associations markedly.

Conclusions In Belarus, similar socioeconomic differentials in height were observed in both children and their parents. Among children height differentials were partly explained by mid-parental height and number of older siblings. Leg length was not a more sensitive indicator of childhood socioeconomic conditions than trunk length.

P1-491

## SOCIO-ECONOMIC VARIATION IN THE USE OF CT SCANS IN YOUNG PEOPLE IN THE NORTH OF ENGLAND, 1990-2002

doi:10.1136/jech.2011.142976g.79

<sup>1</sup>M Pearce,\* <sup>1</sup>J Salotti, <sup>2</sup>K McHugh, <sup>3</sup>K P Kim, <sup>1</sup>A Craft, <sup>4</sup>J Lubin, <sup>4</sup>E Ron, <sup>5</sup>L Parker. <sup>1</sup>Newcastle University, Newcastle upon Tyne, UK; <sup>2</sup>Great Ormond Street Hospital, London, UK; <sup>3</sup>Kyung Hee University, Gyeongi-Do, Republic of Korea; <sup>4</sup>National Cancer Institute, Bethesda, Maryland, USA; 5Dalhousie University, Halifax, Nova Scotia, Canada

Introduction Social patterning is known to influence health throughout life. In childhood, studies have shown increased injury rates in more deprived settings. Through this, it is also possible that socio-economic status may be related to rates of undergoing certain medical procedures with relatively high radiation doses, such as computed tomography (CT) scans. This study aimed to assess socioeconomic variation among young people having CT scans in the North of England between 1990 and 2002.

**Methods** Electronic data were obtained from Radiology Information Systems of all nine National Health Service hospital Trusts in the region. Data related to CT scans, including sex, date of scan, age at scan, number and type of scans were assessed in relation to quintiles of Townsend deprivation scores, obtained from linkage of postcodes with UK census data.