to 10 years (64.0–87.0%). The correlation coefficients varied from 0.1 to 0.4 ($p < 0.05$).

Conclusions Although most of the correlations between the instruments were moderate, frailty prevalence varied largely according to the instrument used to assess the condition. These differences are justified because of the different domains assessed by each instrument.

SP1-53 THE EFFECT OF SOCIAL DEPRIVATION ON WEIGHT IN THE UK CYSTIC FIBROSIS POPULATION

doi:10.1136/jech.2011.142976n.30

¹D Taylor-Robinson,* ¹M Whitehead, ²P Diggle, ¹R Smyth. ¹University of Liverpool, Liverpool, UK; ²Lancaster University, Lancaster, UK

Background Maintaining nutritional status is a key component of care in people with cystic fibrosis. Low socioeconomic status has been linked with poor outcomes in CF. We explored, for the first time in a UK-wide cohort, longitudinal weight gain and its relationship with socioeconomic status (SES).

Methods We undertook a retrospective longitudinal cohort study of 4346 people with cystic fibrosis aged < 20 years (21 132 observations) in UK CF registry between 1995 and 2006. Census based indices of multiple deprivation (IMD) from the UK constituent counties were used as small area measures of SES. Piecewise mixed model regression was used to estimate the effect of SES on weight-for-age z-score (WFA).

Results WFA was significantly lower in the most deprived quintile at all time points. The estimated WFA at birth (intercept) was -0.64 in the least deprived quintile compared to -1.31 in the most deprived (mean difference 0.67 95% CI 0.42 to 0.92). The population WFA increased up to age three by 0.2 per year, and then declined subsequently by -0.033 per year. There was a significantly steeper improvement in WFA in the most deprived quintile in the first 3 years (mean difference per year 0.13 95% CI 0.06 to 0.20), with no difference in the rate of decline subsequently.

Conclusions Social deprivation is associated with lower WFA in the UK cystic fibrosis population, but there is a period of increased weight gain in the first 3 years, highlighting the importance of early diagnosis and treatment.

SP1-54 RESULTS OF A 3-YEAR WORKPLACE WELLNESS PROGRAM AMONG A WORK COHORT IN KUALA LUMPUR, MALAYSIA

doi:10.1136/jech.2011.142976n.31

^{1,2}F M Moy,* ¹A M Bulgiba. ¹Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia; ²Julius Centre University of Malaya, Kuala Lumpur, Malaysia

Introduction Workplace wellness programs are proven to be an important strategy to prevent cardiovascular diseases and stroke. Therefore, a workplace wellness program was conducted among a work cohort in Kuala Lumpur with the aim of improving risk factors for cardiovascular disease and stroke.

Methods This was an open cohort where all employees aged 35 years and above in the workplace were invited to participate in the wellness program. This program involved voluntary yearly screening with results dissemination, lifestyle counselling or referral for medical treatment when necessary. Ethics clearance and informed consent were obtained. Fasting blood glucose, lipid profile, blood pressure, weight, height and waist circumference were measured following standard protocols. This paper will report the findings over a period of 3 years (2008–2010).

Results Majority of this cohort ($n=1923$) were Malays (77.9%), followed by Chinese (8.4%), Indians (9.9%) and others (3.8%). The proportion of female participants was 53%. The mean age of this

cohort was 48.5 ± 5.2 years at baseline. In the General Linear Model, after adjusted for race and sex, LDL cholesterol and total cholesterol levels were significantly improved after 3 years. Their mean (95% CI) total cholesterol levels over the 3 years (2008–2010) were 5.59 (95% CI 5.49 to 5.69), 5.47 (5.40 to 5.55) and 5.39 (5.32 to 5.47) mmol/l respectively. The mean LDL cholesterol levels were 3.59 (3.52 to 3.66), 3.49 (3.43 to 3.26) and 3.33 (3.56 to 3.40) mmol/l respectively.

Conclusions Our findings show that low intensity workplace wellness program is effective in improving some cardiovascular risk factors.

SP1-55 WEQAYA: A WHOLE POPULATION CARDIOVASCULAR SCREENING PROGRAMME IN ABU DHABI, UNITED ARAB EMIRATES

doi:10.1136/jech.2011.142976n.32

C Hajat,* O Harrison, Z Al Siksek. Department of Public Health & Research, Health Authority Abu Dhabi, Abu Dhabi, United Arab Emirates

Introduction Data have shown the UAE to have high rates of cardiovascular disease but the risk factor burden remained poorly studied. This study describes the baseline cardiovascular risk profile of the National population of Abu Dhabi.

Methods Adults aged 18 years or over were screened using self-reported indicators, anthropometric measures and blood tests in primary care.

Results The study included 50 138 subjects. Mean age (SD) was 36.82 (14.30) years with 21 663 (43%) males and 28 474 (57%) females. Numbers and crude prevalence rates were for obesity 17 556 (35%), overweight 15 823 (32%), central obesity 27 480 (55%), diabetes 8528 (18%), pre-diabetes 13 127 (27%), dyslipidaemia 21 655 (44%) and hypertension 11 377 (23.1%). Smoking rates were 5570 (26%) in males and 221 (0.8%) in females. Age-standardised rates for diabetes and pre-diabetes were 11 792 (25%) and 14 158 (30%), obesity and overweight were 19 711 (41%) and 16 298 (34%). Family history of premature cardiovascular disease was independently associated with a past history of cardiovascular disease with an OR of 5.34 (95% CI 3.79 to 7.52).

Conclusion This population-wide cardiovascular screening programme in the Middle East has demonstrated a very high cardiovascular burden for this small and young population. The data form a baseline against which progress is monitored for the population-wide Abu Dhabi Cardiovascular Disease Programme.

SP1-56 ASSOCIATION BETWEEN OVERWEIGHT, OBESITY AND SELF-PERCEPTION OF BODY WEIGHT IN ADULTS

doi:10.1136/jech.2011.142976n.33

¹G França,* ¹D Gigante, ²M T Olinto. ¹Universidade Federal de Pelotas, Pelotas, Rio Grande do Sul, Brazil; ²Universidade do Vale do Rio dos Sinos, Rio Grande do Sul, Brazil

Introduction This study aimed to examine the association between overweight, obesity and self-perception of body weight in adults.

Methods A cross-sectional population-based study was carried out in the city of Pelotas, southern Brazil, with a sample of individuals aged 20–59 years. Weight and height of the participants were measured by previously trained evaluators. Overweight and obesity were defined as body mass index $\geq 25 \text{ kg/m}^2$ and $\geq 30 \text{ kg/m}^2$, respectively. Self-perceived body weight status was directly and indirectly assessed. The participants were first asked whether they perceive themselves as too thin, thin, normal, fat or too fat and then the difference between reported ideal and actual body weight measured after the interview was calculated.