

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

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**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

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**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

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**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

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**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  $\geq 25$  kg/m<sup>2</sup> and  $\geq 30$  kg/m<sup>2</sup>, 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.

**Results** A total of 1894 adults participated in the study, of which 57.4% were women. The prevalences of overweight and obesity were 58% and 23.8%, respectively. About 40% of the participants reported they perceived their weight as normal. However, when self-perceived body weight was indirectly assessed, 63.3% reported a desire to weigh less. Among the overweight and obese participants, 61% and 86.4% perceived themselves as fat or very fat, respectively, and reported a desire to weigh less.

**Conclusion** In this sample with high prevalences of overweight and obesity, most participants perceived their excess weight and reported a desire to weigh less. This seems an ideal setting for the implementation of interventions targeting weight loss and promoting healthy habits.

### SP1-57 EUROPEAN BONE TUMOUR OUTCOME STUDY (EBTOS): OVERVIEW OF HEALTH RELATED QUALITY OF LIFE (QOL) IN STUDY COHORT

doi:10.1136/jech.2011.142976n.34

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**Introduction** Survivors of bone tumours diagnosed in childhood or early adulthood are reported to have more impairment of health related QOL than most other cancer survivor groups. Reports of the relationship between QOL and local treatment strategy have been inconsistent. To clarify this issue a European cohort of bone tumour survivors was identified. This report forms a baseline for further analyses.

**Methods** Osteosarcoma and Ewing's sarcoma survivors were >5 years from diagnosis, <40 yrs at diagnosis and >16 yrs at time of survey. 1145 eligible survivors were mailed a questionnaire which included socio-demographic data, recall of treatment, SF36, Rosenberg Self Esteem Scale, EORTC Body Image & Sexuality modules and TESS to assess physical function. Statistical analysis was with  $\chi^2$  and t test using Stata software.

**Results** 714 (62%) survivors returned questionnaires (253 UK, 31 Netherlands, 430 DE). Median age at diagnosis was 15 yrs (1–38) and at survey was 26 yrs (16–52). Time since diagnosis was 5–20 yrs (median 11). Survivors had: Ewing's sarcoma (319), osteosarcoma (395), upper extremity site (107), lower (535), axial (72), amputation (161), rotationplasty (51), limb salvage (502). Most were single and childless, only 6% were unemployed while 64% felt that job opportunities were affected. SF36 scores showed impaired physical (UK and DE) and mental health (DE) compared to population norms, but enhanced self esteem. There were national differences in sub-scale scores.

**Conclusions** This overview of the EBTOS cohort confirms areas of impaired QOL balanced by enhanced self-esteem, while also demonstrating variability between the national groups.

### SP1-58 MALNUTRITION, QUALITY OF LIFE AND CANCER: ASSOCIATION BETWEEN DIFFERENT NUTRITIONAL PARAMETERS

doi:10.1136/jech.2011.142976n.35

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**Introduction** Weight loss is a frequent complication in patients with cancer, and it is present in almost 85% of patients in some specific

kinds of tumour. Malnutrition, decreased functional capacity and quality of life (QOL) contribute to an increased morbidity and mortality in these patients.

**Objectives** To evaluate the association among nutritional status, quality of life, index of fat free mass (FFMI) and functional capacity in patients undergoing chemotherapy.

**Methods** A prospective study was conducted in patients before the first chemotherapy course in the Hospital of Federal University of Pelotas, Brazil. Nutritional status was determined by Patient-Generated Subjective Global Assessment and quality of life by the European Organization for Research and Treatment of Cancer Quality of Life Questionnaire. Bioelectrical impedance analysis and hand grip strength (HGS) were performed to evaluate FFMI and functional capacity, respectively.

**Results** 75 patients were evaluated, 74.7% had cancer of the digestive system. Only 12.8% of the patients were classified as well nourished. HGS median was 26 kg (IQR:18; 32 kg) FFMI median was 17.5 kg/m<sup>2</sup> (IQR:16.1; 18.8 kg/m<sup>2</sup>). Severely malnourished patients had a worse functional capacity (p=0.01); lower FFMI (p=0.005) and lower general QOF scores (p=0.03) than the nourished ones. A significant positive correlation was found between IFFM and HGS (r=0.51; p<0.001) and significant negative correlations between functional capacity and general QOL (r=-0.48; p<0.001) and HGS (r=-0.44; p<0.001).

**Conclusions** Malnutrition is a determining factor in the prognosis and QOL in these patients and it can be assessed by different parameters such as body composition, subjective evaluations or changes in functional capacity.

### SP1-59 DEPRESSION AMONG ELDERLY PEOPLE IN AN OLD HOME OF DHAKA CITY

doi:10.1136/jech.2011.142976n.36

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**Introduction** With a rapidly ageing society, geriatric depression is emerging as important public health concern. The untreated depressed elderly patients have significant clinical and social implications as these disorders decrease an individual's quality of life and increase dependence on others. The present study aimed to assess the level of depression and its associated factors among the elderly (60 years old and above) in an old home.

**Methods** Under a cross sectional design 107 respondents aged >60 years were selected purposively from an Old Home of Dhaka city, Bangladesh. A 30-item Geriatric Depression Scale (GDS) questionnaire was used to assess the level of depression with a score  $\leq 9$  as normal or non-depressive, 10–19 as mild and 20–30 as severely depressed.

**Results** Mean age of study participants was 69.4 $\pm$ 5.1 years and 63% were male, 46.7% illiterate, 61.7% from rural area. About half of elderly respondents were having some degree of depression of whom 8.4% were severely depressed. Depression was more common in females (60%) than males (40%). Depression was significantly associated with nuclear family (p=0.009), low family income (p=0.001), female gender (p=0.048), chronic illness (p=0.042) and widow or widowers (p=0.036). No influence of educational status and living area was found.

**Conclusion** This study showed that proportion of depression was high among elderly and depression was significantly associated with nuclear family, female gender, chronic illness, widow/widower and low family income. Along with other illness depression should also be one of the key areas of concern for the elderly population.