Results About 52.6% in 2003 and 67.4% in 2008 of women aged 40 or older reported receipt of a mammogram. Compared to women 40–49 years old, those aged 50–69 had higher odds of having been screened (1.076 in 2003 and 1.354 in 2008), those aged 70 or older had lower odds (0.513 in 2003 and 0.625 in 2008). The odds increase with family income, education, being married, seeing a physician. Having insurance doubles the odds, as does living in a metropolitan area (3.620 in 2003 and 3.322 in 2008). Compared to the North region, residents in all other regions had larger odds.

Conclusions The age-group targeted by the national policy had marked increase in screening coverage. There are indications of a lessening in inequalities due to income levels, but disparities linked to regional variation have not been reduced.

P1-270 SMALL AND LARGE FOR GESTATIONAL AGE CHILDREN HAVE DIFFERENT EATING BEHAVIOURS AT 6 MONTHS OF AGE

doi:10.1136/jech.2011.142976e.62

^{1,2}A Oliveira,* ¹E Pinto, ³P Moreira, ^{1,2}A C Santos, ^{1,2}H Barros, ^{1,2}C Lopes. ¹Public Health Institute of the University of Porto Medical School, Porto, Portugal; ²Department of Hygiene and Epidemiology of the University of Porto Medical School, Porto, Portugal; ³Faculty of Nutrition and Food Sciences of the University of Porto, Porto, Portugal

Aim To relate eating behaviours at 6 months of age with weight for gestational age at birth.

Methods Study subjects belong to a population-based birth cohort assembled in Porto, Portugal (Generation XXI, n=8666). A sub-cohort of 1562 newborns was re-evaluated at 6 months and 1227 singletons presented data on variables of interest. Data were gathered by trained interviewers. Mother answered a questionnaire on socio-demographic, clinical and behavioural characteristics. Small for gestational age (SGA) and large for gestational age (LGA) were defined as <10th and >90th percentile, respectively, of sex-specific Kramer growth charts. OR and 95% CIs were obtained from unconditional logistic regression, after adjustment for sex, mother's age, education and pre-pregnancy body mass index, maternal smoking during pregnancy, and breastfeeding.

Results Approximately 15% of children were SGA and 4% were LGA. Compared to adequate for gestational age children, SGA had more frequently mothers reporting difficulties in feeding at 6 months (OR=1.52, 95% CI 1.01 to 2.31) and eating small quantities each time (OR=1.78, 95% CI 1.27 to 2.49). LGA children had also more feeding difficulties (OR=2.26, 95% CI 1.10 to 4.63) and a higher probability of refusing solid foods (OR=2.21, 95% CI 1.02 to 4.80). No associations were found neither with eating slowly, being angry at the meals' end, choke with food and spitting up milk, nor a later weaning or inclusion of fruits and vegetables as first foods.

Conclusions Both SGA and LGA children presented more feeding difficulties at 6 months of age, and LGA was associated with neophobia to solid foods.

P1-271 PREVALENCE, RISK FACTORS AND PATTERNS OF CHRONIC KIDNEY DISEASE IN A RURAL COMMUNITY IN SOUTH WEST NIGERIA

doi:10.1136/jech.2011.142976e.63

¹R Oluymbo,* ²A Akinsola, ¹O Ayodele, ²A Onayade, ²F Arogundade, ²A Sanusi, ¹P Akinwusi, ¹O Okunola. ¹Ladoke Akintola University of Technology Teaching Hospital, Osogbo, Osun state, Nigeria; ²Obafemi Awolowo University Teaching Hospital, Ile-Ife, Osun state, Nigeria

Introduction Chronic kidney disease (CKD) is a global public health problem. Despite the long term difficulties of this condition there is paucity of community derived data in sub-Saharan Africa and especially in Nigeria, the most populated country in Africa. This lack of data is hampering an appropriate response.

Methods Adults (aged ≥ 18 years) were randomly selected. A structured questionnaire was used to collect data on sociodemographic characteristics and knowledge of kidney disease. Clinical examination was undertaken including: anthropometry, blood pressure, fasting or random blood sugar, dipstick urinalysis, albumin to creatinine ratio and urine microscopy. Glomerular filtration rate (GFR) was estimated using the Modification of Diet in Renal Disease (MDRD) equation.

Results The mean age of participants was 45.8 ± 19.0 years with a male: female ratio 0.8:1. 19% consumed alcohol and 7% smoked. 20% used regular analgesia and 75% used herbal concoctions. The prevalence of hypertension was 30%, diabetes mellitus (DM) (3.7%), obesity (defined by BMI) 2.7% and elevated waist circumference (14.6%). Urine microscopy revealed: haematuria 3.1%, ova of *Schistosoma haematobium* 1.1% and macroalbuminuria (8.9%). An estimated GFR < 60 ml/min/1.73 m² occurred in 12.3%. The prevalence of CKD was 18.8%. Increasing age (OR 0.92, 95% CI 0.88 to 0.96), female gender (OR 4.87, 95% CI 1.34 to 17.74), systolic blood pressure (OR 1.04, 95% CI 1.01 to 1.07) and DM (OR 15.76, 95% CI 1.25 to 199.24) were predictive of CKD.

Conclusion CKD and its risk factors are prevalent in this community. The majority had moderately impaired kidney function. There is need for both primary and secondary preventive programmes.

P1-272 EVALUATION OF EFFECTS OF ATOMIC BOMB SURVIVORS' HEALTH HANDBOOKS ON THEIR HEALTH PROMOTION

doi:10.1136/jech.2011.142976e.64

K Otani,* M Ohtaki, K Satoh, T Tonda. Hiroshima University, Hiroshima, Japan

Introduction Atomic bombs were dropped on Hiroshima and Nagasaki in 1945, and then A-bomb survivors' health handbooks (shortly 'handbooks') were issued by the Japanese government to help A-bomb survivors in 1957. They have been able to receive free medical checkup twice for a year and free medical care for designated disorders. The purpose of the study is to evaluate effects of A-bomb survivors' health handbooks focusing on the relationship between a mortality risk and a length of having handbook.

Methods Objects for analysis were selected from the ABS database of RIRBM Hiroshima University. The number of over-all deaths is 58 599 and the number of censored data is 101 244. Cox's proportional hazard model was applied for analysing the data. The observation period is from 1970 to 1997 and the time variable is a time from 1st January 1970 to an occurrence of death. Length of having a handbook was defined as the period from registration year as an A-bomb survivor to 1970. Sex, age at A-bomb exposure, radiation dose and a length of having a handbook are used as covariates.

Results and Conclusion In men, there was significant negative relationship between a length of having a handbook and a relative mortality risk after being adjusted for sex, radiation dose and age at bombing, but in women such a relationship was not found. A man who got a handbook at a young age had a lower mortality risk compared to a man at an old age.

P1-273 THE CHANGING ROLE OF MORTALITY PREDICTORS OVER 20 YEARS OF OBSERVATION

doi:10.1136/jech.2011.142976e.65

A Pac,* B Tobiasz-Adamczyk, P Brzyski, M Brzyska, M Florek. Jagiellonian University Medical College, Chair of Epidemiology and Preventive Medicine, Krakow, Poland

Longitudinal studies among elderly are concentrated on finding the predictors of mortality. Still, there is an open question if those

predictors are stable over different observation periods or if they are changing. The aim of our study was to assess the change in gender-related predictors of mortality over 20 years of follow-up. Baseline data for this analysis come from epidemiological study of 2472 elderly residents of Krakow (age 65+) conducted in years 1986–1987. The multivariate Cox proportional hazard model was used to assess the changes of the role of predictors over of 20 years. In the male group, we have observed that the effect of coronary heart disease and diabetes mellitus on mortality were decreased with time. The importance of asthma as predictor of death was growing from 1.07 to 1.40 for the full follow-up. In the female group, protective effect of care about health and high functional activity were observed, however their impact decreased with increase of length of follow-up period. Poor SRH increase the mortality risk by 46% during the 5 years period and it decreased to 24% for 20 years of follow-up. Out of analysed chronic diseases the strongest predictor of mortality was diabetes mellitus with the over 60% increased mortality risk. We were able to show that the prognostic value of care about own health and healthy life-style, and high functional activity for women as well as chronic conditions present during the baseline study for men were changing with the length of observation.

P1-274 PREVALENCE AND PREDISPOSING FACTORS FOR MALOCCLUSION AMONG BRAZILIAN PRESCHOOL CHILDREN

doi:10.1136/jech.2011.142976e.66

¹A Carvalho, ¹S Paiva,* ¹C Viegas, ¹A Scarpelli, ^{1,2}F Ferreira, ¹I Pordeus. ¹Federal University of Minas Gerais, Belo Horizonte, Brazil; ²Federal University of Minas Gerais, Curitiba, Brazil

Introduction The aim of this study was to assess the prevalence of malocclusion in primary teeth and its predisposing factors.

Methods A randomised representative cross-sectional study was carried out in Belo Horizonte, Brazil, with 1069 preschool children between 60 and 71 months of age. A questionnaire addressing individual and behaviour characteristics of children was self-completed by parents. The oral examination was performed by a single dentist calibrated ($\kappa \geq 0.82$) for the diagnosis of the following types of malocclusions: posterior crossbite, overjet (>2 mm), anterior crossbite, anterior open bite and deep overbite. The chi-square and Fisher's exact tests were used, with the level of significance set at 5%. The study was approved by the Ethics Committee of the Federal University of Minas Gerais.

Results The overall prevalence of malocclusion was 46.2%. The specific prevalence of each malocclusion type was 13.1% for posterior crossbite, 10.5% for overjet, 6.7% for anterior crossbite, 7.9% for anterior open bite and 19.7% for deep overbite. No statistically significant associations were found between malocclusion and breast feeding, bottle feeding, pacifier sucking, finger sucking or nail biting ($p > 0.05$). No statistically significant associations were found between malocclusion and the presence of these habits after 2 years of age ($p > 0.05$). No statistically significant associations were found between malocclusion and parents' report of the occurrence of stuffy nose, open mouth, nose operation, throat operation or sinusitis ($p > 0.05$).

Conclusion The prevalence of malocclusion was high, but the predisposing factors investigated were not associated to the presence of malocclusion.

Funding Supported by FAPEMIG and CNPq.

P1-275 HEARING HEALTH IN ELDERLY: A POPULATION-BASED STUDY IN SÃO PAULO CITY, BRAZIL

doi:10.1136/jech.2011.142976e.67

K M Paiva,* S M Alencar, C L G Cesar, M B de Azevedo Barros, L Carandina, M C G P Alves, M Goldbaum. *University of São Paulo, São Paulo, Brazil*

Introduction Hearing loss in older people is one of the most prevalent chronic conditions. In 2004, was implemented in Brazil the Hearing Health Attention National Policies. This policy contains programs for prevention, diagnostic and rehabilitation, including donations of hearing aids and providing education about hearing health.

Methods Data are from the Survey of Health of São Paulo (ISA-Capital, 2008), a population-based cross-sectional study ($n=3271$). This survey utilised the same methodology the previous surveys conducted at 2001 and 2003. We analysed the subgroup of elderly (60 years and above— $n=924$). We used the χ^2 test of association and analysis of Poisson regression (significance level: 0.05).

Results The prevalence of self-reported hearing loss in elderly in this study was 12.4%. This prevalence was higher in men than women (RP: 1.5; $p=0.01$) and in higher ages (more 80 years) than in 60–69 years (RP: 2.2; $p=0.00$). 24.4% of them did not know the cause of hearing loss and 42% related that old age is cause of this deficit. 38.8% of interviewed said that they do not need medical assistance or treatment rehabilitation.

Conclusion The unknowledge of the elderly about the causes of hearing loss and the need to assistance suggests that the government's policies needs to evaluate and improve the process of assisting in these people with hearing impairment, assuring its effectiveness. Since ageing is getting wide, developing countries like Brazil, need to meet new demand from this segment of the population.

P1-276 A HISTORICAL COHORT STUDY TO DETERMINE THE PREVALENCE OF COMMON CHRONIC RESPIRATORY DISEASES AND MEDICATION USE IN DRUG MISUSERS

doi:10.1136/jech.2011.142976e.68

F Palmer,* M Jaffray, M Moffat, C Matheson, A Coutts, J Haughney. *Centre of Academic Primary Care, University of Aberdeen, UK*

Introduction A local substance misuse study and anecdotal evidence from primary care suggested many methadone patients have respiratory disease and/or respiratory prescriptions.

Method This exploratory study used a historical cohort design with matched controls. Analysis of PCCIU (Primary Care Clinical Informatics Unit) GP consultation data were conducted. The prevalence of respiratory diseases and respiratory prescriptions between drug misusers and controls were compared.

Results The PCCIU consultation data were taken from a cohort of 18570 patients (9285 per group), of whom, 64% ($n=11885$) were male and 75.7% ($n=14060$) were aged 31–59 years. The results revealed an increased prevalence of chronic respiratory disease in drug misusers vs controls. Drug misusers were more likely to be prescribed chronic respiratory disease medications than controls. Adjustment for smoking status revealed drug misusers still have significantly increased odds of having respiratory disease and/or receiving respiratory prescriptions. (Abstract P1-276 table 1).