

**P2-296 DIFFERENCES IN SOCIOECONOMIC STATUS, SPREAD OF DISEASE, RURAL RESIDENCE AND ACCESS TO SURGERY DO NOT EXPLAIN LOWER SURVIVAL FROM BREAST CANCER FOR ABORIGINAL WOMEN**

doi:10.1136/jech.2011.142976k.29

R Supramaniam,\* D O'Connell. *Cancer Council NSW, Sydney, New South Wales, Australia*

**Introduction** We wanted to investigate any differences in breast cancer survival for Aboriginal women compared with non-Aboriginal women in New South Wales, Australia (NSW).

**Methods** All women diagnosed with primary invasive breast cancer in NSW in 1994–2002 (n=31 525) were probabilistically linked with all NSW hospital admissions. 296 women identified as Aboriginal at any hospital admission. Proportional hazards models were used to investigate the time to first surgery and to analyse cause-specific survival adjusting for differences in comorbidities, diagnosis age, disease spread, diagnosis year, rural residence and socioeconomic status.

**Results** Aboriginal women in NSW had similar times to their first surgery as non-Aboriginal women (HR 0.74, 95% CI 0.51 to 1.06) after adjusting for age, year of diagnosis, disease spread, socioeconomic status, rural residence and comorbidities. However, Aboriginal women were 53% more likely to die of their breast cancer (HR 1.53, 95% CI 1.19 to 1.97), after adjusting for whether they had surgery, diagnosis age, disease spread, diagnosis year, socioeconomic status, rural residence and comorbidities.

**Conclusions** Differences in breast cancer survival in NSW for Aboriginal and non-Aboriginal women were not totally explained by demographic, disease or access to surgical treatment differences. Residual differences in breast cancer survival maybe due to differences in uptake of adjuvant therapies including chemotherapy and radiotherapy, unmeasured comorbidities or cultural barriers to accessing optimal cancer care. Overall breast cancer treatment and outcomes were better than for other cancers and we will investigate the reasons for this.

**P2-297 SURVIVAL ANALYSIS OF DIALYSIS PATIENTS IN THE BRAZILIAN HEALTH SYSTEM**

doi:10.1136/jech.2011.142976k.30

D Szuster,\* W Caiaffa, E I Andadre, F Acurcio, M Cherchiglia. *Universidade Federal de Minas Gerais, Belo Horizonte, Minas Gerais, Brazil*

**Introduction** This study performed survival analysis on patients that had commenced "Haemodialysis (HD) and Peritoneal Dialysis (DP) renal replacement therapy (RRT)" on the National Public System in Brazil.

**Method** The following criteria were used to select patient records: patients admitted between 2002 and 2003 with at least three consecutive months of treatment and >18 years of age. Independent variables tested were gender, age, region of residence, basic cause of kidney failure, Human Development Index (IDH) of the year 2000. A proportional hazards model to investigate the factors associated with death was used.

**Results** There were 31 298 patients. The majority were on HD, average age of 54 years, and residing in the Southeast region. The average IDH for the residence cities of the patients was 0.78. The main IRCT diagnosis was hypertension. The final model showed that the following variables were associated with a greater probability of death after 3 years of follow-up: female gender; age over 55 years; primary diagnosis of mellitus diabetes; initiated on DP; not residing in the southeast region. Residing in cities with greater IDH was related to a reduced risk of death. The adjusted estimated risk,

for the 3-year treatment, was HR=1.17, in favour of HD. The evaluation of risk between the modalities has shown that age is an important factor for a greater risk on DP, independently of gender and IRCT cause.

**Conclusion** The findings were corroborated by literature data that indicate that older patients have a worse prognosis when undergoing DP.

**P2-298 MEAT DERIVED MUTAGENIC ACTIVITY AND THE RISK OF COLORECTAL CANCER**

doi:10.1136/jech.2011.142976k.31

<sup>1,2</sup>S M Tabatabaei,\* <sup>1</sup>J Heyworth, <sup>1</sup>L Fritschi, <sup>1</sup>M Knuiman. <sup>1</sup>*University of Western Australia, Western Australia, Australia;* <sup>2</sup>*Zahedan University of Medical Sciences, Zahedan, Iran*

**Introduction** Colorectal cancer (CRC) is an important cause of morbidity and mortality. High intake of meat has been associated with increased risk of CRC in some studies but results are inconsistent. Instead of examining meat intake it may be appropriate to examine total meat-derived mutagenic activity (MDMA), which incorporates the mutagenic activity from identified and other yet unidentified chemical compounds in cooked meat.

**Methods** This case-control study used data from the Western Australian Bowel Health Study. It included 567 cases and 713 age and sex frequency matched controls, aged between 41 and 80 years. Meat consumption information was collected via self-administered questionnaires. Exposure to MDMA and predicted heterocyclic amine -derived mutagenic activity (PHDMA) was estimated by linking the meat data into a carcinogen database (CHARRED). The data were analysed using multivariable logistic regression.

**Results** ORs for increasing quartiles of MDMA indicated no association with CRC. Although the ORs for comparing subjects in the higher quartiles of PHDMA based on total and red meat consumption with lower quartiles of intake were less than one, none of these relationships were statistically significant. However, the PHDMA from white meat was associated with a non-significant increase in the risk of CRC (OR high compared with lowest quartile=1.17, 95% CI 0.83 to 1.64, p>0.30).

**Conclusion** Our study did not support the association between exposure to MDMA and the risk of CRC.

**P2-299 MEN'S PERCEPTIONS AND EXPERIENCES OF THE EARLY DETECTION OF PROSTATE CANCER: A QUALITATIVE STUDY USING GROUNDED THEORY APPROACH**

doi:10.1136/jech.2011.142976k.32

<sup>1</sup>A Taghipour,\* <sup>2</sup>V Vydelingum, <sup>2</sup>S Faithfull. <sup>1</sup>*Faculty of Health, Mashhad University of Medical Sciences, Mashhad, Iran;* <sup>2</sup>*Division of Health & Social Care, Faculty of Health and Medical Science, University of Surrey, Guildford, Surrey, UK*

**Background and Objective** Despite significant progress in prostate cancer research over the last decades, screening of the disease has remained controversial. From a socio-epidemiological perspective, little is known of patients' beliefs about their illness and why they often delay in seeking diagnosis. The purpose of this qualitative study was to understand the experiences and perceptions of men about the early detection of prostate cancer.

**Method** This study used a grounded theory approach incorporating the theoretical perspective of social constructionism. A purposive sampling of 24 men from public and private sector hospitals who

had received therapy were interviewed face to face in Persian using a semi-structured interview guide. Interviews were audio taped, then transcribed in full, translated into English by the investigator, and analysed using MAXqda software.

**Results** The value men accorded to early detection of prostate cancer was found to be conditional upon their beliefs of prostate illness and their experiences about cure. There was a lack of information about the early detection process. The men felt that medical intervention was focused on the biological aspects, ignoring the needs of the psychosocial concerns. The men were not expecting to have symptoms because of prostate treatment; this influenced their subsequent decision-making.

**Conclusion** Given men's perceptions and experiences of the illness, screening of prostate cancer seems to have wider implications. The findings suggest that early detection of the disease in Iran may need a screening model that incorporates both biomedical and psychosocial aspects.

**P2-300 EFFECTS OF ANTIHYPERTENSIVE DRUG TREATMENTS ON BONE TURNOVER IN ELDERLY MEN: A CROSS-SECTIONAL ANALYSIS OF THE FUJIWARA-KYO OSTEOPOROSIS RISK IN MEN (FORMEN) STUDY**

doi:10.1136/jech.2011.142976k.33

<sup>1</sup>J Tamaki,\* <sup>1</sup>M Iki, <sup>1</sup>Y Fujita, <sup>1</sup>K Kouda, <sup>1</sup>A Yura, <sup>1</sup>E Kadowaki, <sup>2</sup>Y Sato, <sup>3</sup>J-S Moon, <sup>4</sup>K Tomioka, <sup>4</sup>N Okamoto, <sup>4</sup>N Kurumatani. <sup>1</sup>Department of Public Health, Kinki University School of Medicine, Osakasayama, Osaka, Japan; <sup>2</sup>Department of Human Life, Jin-ai University, Echizen, Fukui, Japan; <sup>3</sup>Faculty of Human Sciences, Taisei Gakuin University, Sakai, Osaka, Japan; <sup>4</sup>Department of Community Health and Epidemiology, Nara Medical University School of Medicine, Kashihara, Nara, Japan

**Introduction** Previous studies have found that some antihypertensive drugs may lower fracture risk. However, the impact of antihypertensive drugs on bone metabolism is not entirely clear. We examined how antihypertensive drugs influenced bone status and bone turnover markers.

**Methods** We analysed 1632 Japanese men aged  $\geq 65$  years from a baseline survey (the FORMEN Study) conducted during 2007–2008 as a part of the Fujiwara-kyo study, a larger prospective cohort study. Associations between antihypertensive drugs (ACE,  $\beta$ -blocker, and thiazide diuretic treatments) and bone metabolism (bone mineral density [BMD] at the lumbar spine [LS] and total hip, serum osteocalcin [OC], and serum tartrate resistant acid phosphatase isoenzyme 5b [TRACP5b]) were investigated cross-sectionally.

**Results** Proportions of hypertension and subjects taking antihypertensive drugs were 76.0% (n=1240) and 42.4% (n=692), respectively, in the subjects (mean age;  $73.0 \pm 5.1$  years). The numbers of subjects prescribed ACE,  $\beta$ -blockers, and thiazide diuretics were 62, 41, and 12, respectively. Neither BMD nor bone turnover markers varied significantly between those with ACE prescription and those without. We observed significantly higher LS BMD values and significantly lower OC and TRACP5b values in subjects taking  $\beta$ -blockers than in non-users, and the differences in both marker values remained significant after adjusting for confounders (OC: 4.08 [0.18] vs 4.91 [0.03] ng/ml,  $p=0.039$ ; TRACP5b: 151.23 [0.18] vs 209.98 [0.03] mU/dl,  $p=0.009$ ). TRACP5b values in subjects with thiazide diuretics also remained significant lower after adjusting for confounders (139.98 [0.33] vs 208.91 [0.03] mU/dl,  $p=0.007$ ).

**Conclusion** Bone turnover could be suppressed by  $\beta$ -blocker and thiazide diuretic treatment. Future investigations should be conducted longitudinally.

**P2-301 HIGH PREVALENCE OF SEDENTARINESS AMONG BRAZILIAN ADOLESCENTS LIVING WITH HIV/AIDS**

doi:10.1136/jech.2011.142976k.34

<sup>1</sup>L F Tanaka,\* <sup>1</sup>M D R D de Oliveira Latorre, <sup>1</sup>A M Silva, <sup>1</sup>T C R Oliveira, <sup>1</sup>E C Mendes, <sup>2</sup>H H de Souza Marques. <sup>1</sup>School of Public Health-University of São Paulo, São Paulo, São Paulo, Brazil; <sup>2</sup>School of Medicine, Children's Institute, University of São Paulo, São Paulo, São Paulo, Brazil

**Introduction** Several studies have shown high prevalences of sedentariness among adolescents, however, studies assessing sedentariness of adolescents with HIV are scarce. The aim of this study is to assess the prevalence of sedentariness in this population and its associated factors.

**Methods** 91 patients aged 10–19 years responded to the questionnaire on physical activity validated for Brazilian adolescents. The questionnaire is comprised of 17 questions (15 on sports and two on transportation physical activity). The cut-off point for sedentariness was 300 min/week.

**Results** Mean age at interview was 15.1 years (SD=2.6 years). A greater proportion of girls was sedentary (80%×61%,  $p<0.05$ ). All other variables tested were not associated with sedentariness: ethnicity (white-65%; non-white-62%,  $p=0.286$ ); living with family (yes-70%; no-89%,  $p=0.220$ ); altered waist circumference (yes-70%; no-72%  $p=0.881$ ) and overweight (yes-0%; no-8%,  $p=0.081$ ). No differences between means of biochemical parameters were found when comparing active and sedentary adolescents: viral load (15995×15922 copies,  $p=0.995$ ); CD4 (485×441 cells,  $p=0.540$ ); total cholesterol (156×162 mg/dl,  $p=0.523$ ); HDL-cholesterol (39×37 mg/dl,  $p=0.373$ ) and LDL-cholesterol (94×95 mg/dl,  $p=0.874$ ). 1/3 of adolescents spent no time practicing physical activity. Among those who reported practicing it, the sports most cited were: football (44.4%), volleyball (14.4%) and cycling (7.8%). Mean time spent practicing sports was 198.9 min/week (SD=271.1 minutes) and mean time spent walking/cycling to school was 74.1 min/week (SD=104.2).

**Conclusion** A high prevalence of sedentariness was found in this population. Sedentary behaviour may have a negative impact on adolescents' health.

**P2-302 NOCTURNAL INTERMITTENT HYPOXIA AND CARDIOVASCULAR RISK FACTORS IN COMMUNITY-DWELLING JAPANESE: THE CIRCULATORY RISK IN COMMUNITIES STUDY (CIRCS)**

doi:10.1136/jech.2011.142976k.35

<sup>1</sup>T Tanigawa,\* <sup>2,4</sup> Muraki, <sup>3</sup>K Yamagishi, <sup>1</sup>S Sakurai, <sup>2</sup>T Ohira, <sup>2</sup>H Imano, <sup>4</sup>A Kitamura, <sup>4</sup>M Kiyama, <sup>5</sup>S Sato, <sup>2</sup>H Iso. <sup>1</sup>Ehime University Graduate School of Medicine, Toon, Ehime-ken, Japan; <sup>2</sup>Osaka University Graduate School of Medicine, Suita, Osaka-fu, Japan; <sup>3</sup>University of Tsukuba, Tsukuba, Ibaraki-ken, Japan; <sup>4</sup>Osaka Medical Center for Health Science and Promotion, Osaka, Osaka-fu, Japan; <sup>5</sup>Chiba Prefectural Institute of Public Health, Chiba, Chiba-ken, Japan

**Introduction** To investigate whether nocturnal intermittent hypoxia (NIH), a surrogate marker for sleep apnoea, is associated with cardiovascular risk factors, we conducted epidemiological studies.

**Methods** The CIRCS is a prospective cohort study across Japan since 1963 to examine risk factors for cardiovascular disease. Subjects aged 40–69 years were recruited to the sleep study in three communities. NIH was estimated by hourly occurrences of oxygen desaturation of  $\geq 3\%$  (3% oxygen desaturation index [3% ODI]) by a pulse-oximeter during a night's sleep in the participant's own home. We defined no, mild and moderate-to-severe NIH by 3% ODI as  $<5$ , 5 to  $<15$  and  $\geq 15$  events/h, respectively. We conducted cross sectional studies on