

Conclusion These findings suggest that an early screening for lost of bone mass should be done, allowing the beginning of adequate therapy, in order to assure life quality to middle aged and older women.

P1-229 **DIET QUALITY OF MALE ADULT PARTICIPANTS HIM STUDY-BRAZIL (NATURAL HISTORY OF HPV INFECTION IN MEN): MULTICENTRIC STUDY**

doi:10.1136/jech.2011.142976e.22

J Carlos, A Previdelli, G Bartira, M L Baggio, A Giuliano, L Villa, E Lazcano, D Marchioni,* R Fisberg. *University of Sao Paulo, Sao Paulo, Brazil*

Introduction The study "Natural History of HPV Infection in Men" (HIM study) is an international multicenter prospective cohort study that seeks to determine the incidence, persistence and remission of human papillomavirus (HPV) infection in men.

Objective To assess the dietary quality on participants in HIM—Brazil.

Methods Dietary intake of 70 participants were measured by two 24 h dietary recalls. The Brazilian Healthy Eating Index Revised (BHEI-R), developed according to current nutritional recommendations was used.

Methods The BHEI-R comprises a 12-components system of nine food groups based on Brazilian Dietary Guidelines (2006), which daily portions are expressed on energy density. Intakes at the level of the standard or more were assigned the maximum number of points: 5 to Total Grains; Whole Grains; Dark-Green and Orange Vegetables and Beans; Total Vegetables; Total Fruit and Whole Fruit); 10 to Dairy Products; Meat and Beans; Oils; Saturated Fat; and Sodium and 20 for SoFAAS (total calories from solid fat, alcohol and added sugar).

Results The mean B-HEIR score was 59.7 ± 10.3 . For Total Grains 4.7 ± 0.8 , Whole Grains 0.9 ± 1.5 , Dark-Green and Orange Vegetables and Beans 4.2 ± 1.7 , Total Vegetables 4.6 ± 1.2 , Total Fruit 3.1 ± 2.0 and Whole Fruit 2.9 ± 2.3 , Dairy Products 4.7 ± 3.1 , Meat and Beans 9.0 ± 2.0 , Oils 8.7 ± 3.2 , Saturated Fat 4.7 ± 3.6 , Sodium 2.1 ± 1.9 and SoFAAS 10.2 ± 5.4 .

Conclusion It was observed a low BHEI-R score, reflecting the low consumption of whole grains, vegetables and fruits. Dietary modifications are necessary to achieve better quality on food intake, potentially beneficial to prevent immunodeficiency and susceptibility to infections.

P1-230 **VALIDITY OF SELF-REPORTED HYPERTENSION AMONG BRAZILIAN ADULTS**

doi:10.1136/jech.2011.142976e.23

S S de Castro Selem, M A de Castro, J V Carlos, B Gorgulho, D M L Marchioni, R M Fisberg,* C L Galvão. *University of Sao Paulo, Sao Paulo, Brazil*

Introduction Hypertension, a chronic disease with high prevalence and trend of increase in Brazil, has important influence on morbidity and mortality. Self-report are widely used to assess hypertension in surveys, due to low cost. However, there are few validation studies of the self-reported hypertension data.

Objective To investigate the validity of self-reported hypertension among adults.

Methods Data from a population-based survey and a complementary study carried out between 2008 and 2010, in 186 Brazilian adults (20 y or over), residents in São Paulo. Sensitivity, specificity as well as predictive values positive (PVP) and negative (PVN) of self-reported hypertension were calculated in relation to hypertension, according to the criteria of the Seventh Joint National Committee

on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (means diastolic blood pressure ≥ 90 mm Hg and/or systolic blood pressure ≥ 140 mm Hg and/or present use of anti-hypertensive drugs).

Results The validity of self-reported hypertension was relatively high in adults: sensitivity 87%, specificity 75%, PVP 70% and PVN 89%.

Conclusion Self-reported hypertension may be used in calculating the prevalence of this chronic disease for monitoring of hypertension trends, in the absence of measured blood pressure, among this population.

P1-231 **FOOD INSECURITY IS ASSOCIATED WITH OVERWEIGHT IN PARIS METROPOLITAN AREA. AN ANALYSIS OF THE SIRS COHORT IN 2010**

doi:10.1136/jech.2011.142976e.24

^{1,2}J Martin-Fernandez, ^{1,2}E Cadot, ^{1,2}F Grillo, ^{1,3}P Chauvin.* ¹INSERM, U707, *Research team on the social determinants of health and healthcare, Paris, France*; ²UPMC Univ Paris 06, UMR-S 707, *Paris, France*; ³AP-HP, Hôpital Saint Antoine, *Unité de santé publique, Paris, France*

Background The relationship of food insecurity with overweight and obesity is still discussed in the literature. This work aimed to explore if this apparently paradoxical association was observed in Paris metropolitan area.

Methods We used data from the "Health, Inequality and Social Breakout" (SIRS) cohort, a longitudinal health and socio epidemiological, population based and representative survey of the general population of the Paris metropolitan area. This cross sectional analysis was based on the 2010 data. Participants' BMI was estimated using self-reported height and weight and computed in a dichotomous variable (BMI < 25 vs BMI ≥ 25). Food insecurity was estimated using the US HFSS and computed in a dichotomous variable: food secure vs food insecure (moderate/severe). Logistic regression models were estimated for men and women separately.

Results Overweight (BMI ≥ 25) prevalence was 39.8%. In men, nationality was significantly associated with being overweight: a European citizen has a higher risk of being overweight than a French one- (OR=2.89; $p=0.002$). In women, socio professional group was a significant determinant of overweight, with a higher risk for workers' (OR=5.37 $p<0.001$, ref= Executives). After adjusting for age, nationality and socioprofessional group, food insecurity was associated with overweight in women (OR=2.24, 95% CI [1.32 to 3.81]) but this association was not significant for men (OR=1.54, 95% CI [0.83 to 2.86]).

Conclusion Food insecurity seems to be a stronger determinant of overweight among women. It remains important to explore and understand the pathway through which this situation is associated with overweight, particularly in terms of nutritional problems and food assistance programs.

P1-232 **HOSPITALISATION FOR CLINICAL COMPLICATIONS IN CANCER PATIENTS: ASSESSING THE NEED FOR PALLIATIVE CARE**

doi:10.1136/jech.2011.142976e.25

¹J F Silva, ²I Mattos,* ³A P Silva. ¹Mato Grosso do Sul State Office of Health, *Campo Grande, Mato Grosso do Sul, Brazil*; ²National School of Public Health, *Oswaldo Cruz Foundation, Rio de Janeiro, Rio de Janeiro, Brazil*; ³Department of Nursing, *Federal University of Mato Grosso do Sul, Campo Grande, Mato Grosso do Sul, Brazil*

Introduction Cancer is a public health problem in Brazil and the National Policy for Oncology determines that health services should

provide all levels of oncologic care. The aim of this study was to assess the need for palliative care in hospitalised cancer patients in Mato Grosso do Sul, one of the Brazilian states that has no public hospital offering this type of care.

Methods A descriptive study of all hospitalisations due to “complications of clinical oncology (ICPO)” in hospitals of the Unified Health System (SUS) in the state of Mato Grosso do Sul, Brazil, was conducted from January 2008 to August 2010. Data were obtained from the Hospital Information System of the Unified Health System (SIH-SUS).

Results There were 5165 hospitalisations for ICPO with cancer as the underlying cause in 94.7%. Average length of stay was 6.2 days and 1189 patients (23.0%) died. Individuals aged 65 years or older accounted for 44.3% of these deaths and for every 3.5 hospital admissions in this age group, one ended in death. Many patients died without the appropriate care.

Conclusion The ageing of the population and the increased incidence of cancer brought new challenges to the Brazilian Unified Health System, including the need for palliative care. This need is not always met for instance as in Mato Grosso do Sul. In this sense, deaths of patients hospitalised for ICPO can be thought of as indicators of advanced disease and they could be useful to national and state policies for oncologic palliative care.

P1-233 ASSESSING THE EFFECT OF INDIVIDUAL AND AREA LEVEL SOCIODEMOGRAPHIC FACTORS ON REGIONAL DIFFERENCES IN MORTALITY AMENABLE TO HEALTHCARE

doi:10.1136/jech.2011.142976e.26

^{1,2}A McCallum,* ³M Arfmann, ⁴A Leyland, ³S Karvonen, ³K Manderbacka, ³I Keskimäki. ¹NHS Lothian, Edinburgh, UK; ²University of Edinburgh, Edinburgh, UK; ³National Institute for Health and Welfare, Helsinki, Finland; ⁴MRC Social and Public Health Sciences Unit, Glasgow, UK

Introduction Mortality from many causes varies geographically. We examine trends in regional differences in amenable mortality in Finland and explore the role of socioeconomic factors.

Methods We analysed deaths amenable to primary and specialist healthcare in the Finnish population aged 25–74 in 1992–2003. Sociodemographic variables were individually linked from annual employment statistics. Three area-level scores were created using factor analysis of municipal level register data; these represented standard of living, deprivation and (poor) social cohesion. Multilevel Poisson regression models were applied adjusting for sex and age, other individual-level variables and area-level factor scores.

Results Mortality from conditions amenable to primary care intervention was more common among men in 1992–1995 but differences disappeared over time. An inverse income gradient increased over time. The unemployed and those outside the labour force had higher mortality. Poor social cohesion of the area was also associated with mortality. Men had more than double the risk of dying from conditions related to specialist care compared to women. An inverse and increasing gradient was seen for income. Employment status was again associated with higher mortality. Poor social cohesion of the area increased risk as did deprivation in 1996–2003. There was little variation between areas for conditions amenable to primary healthcare, but substantial variation for mortality amenable to specialist healthcare.

Conclusion Mortality amenable to primary care is strongly patterned by individual socio-economic circumstances. Conditions amenable to specialist care also show strong social gradients but large area variances suggest that the organisation and delivery of specialist services may also influence mortality.

P1-234 PRENATAL SCREENING FOR SUBOPTIMAL MENTAL HEALTH IN THE POSTPARTUM PERIOD

doi:10.1136/jech.2011.142976e.27

S McDonald,* J Wall, K Forbes, S Tough. University of Calgary, Calgary, Alberta, Canada

Postpartum depression (PPD) is the most common complication of pregnancy in developed countries, affecting 10%–15% of all new mothers. There's been a shift in thinking less in terms of PPD per se to poor psychosocial and transitioning outcomes after giving birth. The objective of this study was to develop a screening tool that identifies women at risk of distress in the postpartum period using information collected prenatally. We used data collected for the All Our Babies Study, a prospective cohort study of pregnant women living in Alberta, Canada (N=1578) that collects a diverse array of information at three time points during the perinatal period. We developed the tool using 2/3 of the sample and performed internal validation on the remaining 1/3 using a regression coefficient-based scoring method. The best fit model included known risk factors for PPD and suboptimal psychosocial health: depression and stress in late pregnancy, history of abuse, and poor relationship quality with partner. The area under the ROC curve was 0.76, with acceptable sensitivity and specificity for a cut-off score of 2 (range 0–7). Comparison of the tool with a widely used PPD screening inventory showed that our tool had better performance indicators. Further validation of our tool for psychosocial distress was seen in its utility for identifying symptoms of anxiety, in addition to depression, at 4 months. There is an opportunity for early detection of risk to inform the development of interventions to prevent difficulties and promote optimal well-being for mothers and their families.

P1-235 DOES SOCIAL SUPPORT BUFFER ANXIETY ASSOCIATED WITH RETURNING TO WORK OR SCHOOL FOR NEW MOTHERS IN THE FIRST YEAR AFTER GIVING BIRTH?

doi:10.1136/jech.2011.142976e.28

S McDonald,* H Kehler, S Tough. University of Calgary, Calgary, Alberta, Canada

In Canada, maternity leave can last up to 1 year after giving birth. For some women, there may be associated anxiety with the prospect of having to return to work or school. We investigated the extent to which employment intentions during early postpartum were associated with symptoms of anxiety and whether this association was moderated by perceptions of social support. We used data from the All Our Babies Study, a community based prospective cohort study of pregnant women in Calgary, Alberta, Canada (n=1578). Women completed confidential questionnaires that collected information about their pregnancy, lifestyle, life events, social support, stress, and mental health at three time points: early pregnancy, late pregnancy, and 4 months postpartum. We asked women detailed questions about their intentions of returning to work or school at the 4 month data collection. Women who noted that they would be returning to work or school within 12 months had significantly higher anxiety symptomatology, controlling for SES and baseline anxiety, than women who were not returning to work or school. We classified women into four mutually exclusive categories according to timing of return to work/school and perceived social support in order to examine the buffering hypothesis of social support. The group of women that manifested the most anxiety comprised those with intentions of returning when their infants were <12 months of age AND low perceived social support. These findings have implications for developing targeted strategies to support working mothers.