

**Conclusion** Alcohol consumption and cigarette smoking were different by gender, residence and education level in Mongolian adults.

### SP1-11 SELF-REPORTED HEALTH AS A PREDICTOR OF MORTALITY IN ELDERLY MEN LIVING IN SOUTHEAST BRAZIL

doi:10.1136/jech.2011.142976m.88

L M Santiago,\* I E Mattos, L L Luz. *Oswaldo Cruz Foundation, National School of Public Health, Rio de Janeiro, Brazil*

**Introduction** Self-reported health is a perception based on an individual interpretation of physical aspects, mental status and expectations and is considered a good predictor of mortality among old people in developed countries. The aim of this study was to evaluate the role of self-reported health as a predictor of mortality in elderly men in a developing country.

**Methods** The study population consisted of 2875 elderly men of a medium size city in Southeast Brazil, who were followed for 4 years or until the date of their death, whichever occurred first. Individuals alive at the end of follow-up were censored. Multivariate analysis was performed through Cox regression models. Variables presenting statistically significant associations with mortality in bivariate analysis were entered into the models.

**Results** During the follow-up, 298 deaths occurred. Elders with self-reported poor health presented a greater risk of death, compared to those with self-reported good/excellent health in almost all stratus of the analysed variables. In the final model, poor self-reported health (HR 1.54 95% CI 1.21 to 1.96), age (HR 1.07 95% CI 1.06 to 1.09), marital status (HR 1.32 95% CI 1.04 to 1.69), current use of cigarette smoking (HR 1.94 95% CI 1.24 to 2.62), cardiovascular disease (HR 1.62 95% CI 1.06 to 2.47), diabetes (HR 1.53 95% CI 1.14 to 2.04) and recent hospitalisation (HR 1.50 95% CI 1.15 to 1.95) were independently associated to mortality.

**Conclusion** Self-reported health was a good predictor of mortality in this population of elderly men, even when adjusted for other independent variables. It is important that healthcare services incorporate this indicator in the health evaluation of old people.

### SP1-12 RELATIONSHIP BETWEEN SLEEP DURATION AT 3 YEARS OF AGE AND GROWTH DURING CHILDHOOD: A MULTI-LEVEL ANALYSIS

doi:10.1136/jech.2011.142976m.89

<sup>1</sup>K Suzuki,\* <sup>2</sup>A Takahashi, <sup>2</sup>M Sato, <sup>2</sup>N Kondo, <sup>2</sup>T Tanaka, <sup>2</sup>A Nagai, <sup>1,2</sup>Z Yamagata. *<sup>1</sup>Center for Birth Cohort Studies, Interdisciplinary Graduate School of Medicine and Engineering, University of Yamanashi, Chuo, Yamanashi, Japan; <sup>2</sup>Department of Health Sciences, Interdisciplinary Graduate School of Medicine and Engineering, University of Yamanashi, Chuo, Yamanashi, Japan*

**Introduction** Short sleep duration in early life has been thought to be a risk factor for subsequent overweight. This study aimed to examine the relationship between sleep duration at 3 years of age and childhood weight status through a multi-level analysis.

**Methods** The study population comprised children born between 1 April 1991, and 31 March 2003, in Kosu City, Japan, and who participated in a medical check-up at 3 years of age. Short and long sleep durations at 3 years of age were the exposures studied. We compared the trajectory of body mass index (BMI) z-scores from 3 to 9 years of age in exposed and non-exposed participants. Random intercepts and slopes model (SAS Proc Mixed) was used for statistical analysis.

**Results** Of 1794 children who participated in a medical check-up at 3 years of age, 1640 (91.4%) were not over-weight at 3 years and were followed-up until they were 9 or 10 years old. The number of children in each category of sleep duration, that is,  $\leq 9$  h, 9–10 h, 10–11 h, and  $\geq 11$  h, was 66 (3.7%), 609 (34.0%), 847 (47.2%), and 271 (15.1%), respectively. BMI z-scores increased with increase in age ( $p=0.03$ ) for boys with a short sleep duration ( $<9$  h). On the other hand, sleep duration was not significantly associated with BMI z-score in girls.

**Conclusion** It was suggested that there is gender difference of the effect of childhood sleep duration on subsequent overweight.

### SP1-13 BEING BREASTFED IN INFANCY AND THE RISK OF BREAST CANCER AMONG JAPANESE WOMEN

doi:10.1136/jech.2011.142976m.90

<sup>1</sup>Y Minami,\* <sup>2</sup>Y Nishino, <sup>3</sup>M Kawai, <sup>4</sup>Y Kakugawa. *<sup>1</sup>Division of Community Health, Tohoku University Graduate School of Medicine, Sendai, Japan; <sup>2</sup>Division of Epidemiology, Miyagi Cancer Center Research Institute, Natori, Japan; <sup>3</sup>Department of Surgical Oncology, Tohoku University Graduate School of Medicine, Sendai, Japan; <sup>4</sup>Division of Surgery, Miyagi Cancer Center Hospital, Natori, Japan*

**Introduction** The incidence of breast cancer is continuously increasing in Japan. The early life exposures such as being breastfed in infancy have been hypothesised to influence subsequent breast cancer risk.

**Methods** We investigated the relationship between having been breastfed and breast cancer risk in a hospital-based case-control study of women aged 30 and over (573 breast cancer cases and 2155 cancer-free controls). Data on reproductive factors, lifestyle, and history of having been breastfed were collected using a self-administered questionnaire.

**Results and Conclusion** After adjustment for known risk factors of breast cancer, no association for having been breastfed was observed overall (OR 1.20; 95% CI 0.82 to 1.75). Analysis stratified according to birth year ( $<1950$ ,  $\geq 1950$ ) demonstrated heterogeneity in the association of having been breastfed with breast cancer risk between the two birth-year groups ( $p$  for interaction = 0.0006); having been breastfed was associated with a decreased risk among women who were born before 1950 (OR 0.59, 95% CI 0.35 to 0.99), whereas it was associated with an increased risk among women born after 1950 (OR 1.65, 95% CI 0.91 to 2.98). These findings indicate that early nutrition has some effect on breast cancer risk. In Japan, the use of standard formula supplement began to spread around 1950. Endocrine disruptors such as organochlorines were also introduced to the food chain at around the same time. The heterogeneity of breast cancer risk between the two birth-year groups may therefore be attributable to these environmental changes related to infant feeding.

### SP1-14 INFLUENCE OF OBESITY INDICATORS ON HYPERTENSION IN ADULTS OF RURAL INDIA

doi:10.1136/jech.2011.142976m.91

S Anwar,\* P Deshmukh, B S Garg. *Mahatma Gandhi Institute of Medical Sciences, Sevagram, Wardha, Maharashtra, India*

**Introduction** Being overweight is associated with twofold to sixfold increase in risk of developing hypertension. Studies in urban Indian population also show this association. Present study examines relationship of different anthropometric indicators and blood pressure levels in rural population in central India about which little is known.