

**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

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**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

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**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

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**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

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**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.

**Methods** This cross-sectional study was carried out in the areas of two Rural Health Training Centres of Department of Community Medicine, Mahatma Gandhi Institute of Medical Sciences, Sevagram; through house-to-house visits. Two stage sampling method (30-cluster followed by systematic random) was used to reach the respondents' households. Partial correlation coefficients were used for continuous variables. Linear regression analysis was used to assess the influence of different anthropometric indicators on the systolic and diastolic blood pressure.

**Results** The mean systolic blood pressure was 120.2 and 118.4 mm Hg in men and women respectively while the mean diastolic blood pressure was 77.7 and 76.3 mm Hg in men and women respectively. Mean values of body mass index (BMI), waist-hip ratio, waist circumference and waist-height ratio was significantly higher among hypertensive than normotensive men and women. There was a significant positive correlation of obesity indicators with both systolic and diastolic blood pressure; except for waist-hip ratio and diastolic blood pressure. BMI was a better predictor of both systolic ( $\beta$  0.59, SE 0.11,  $p < 0.001$ ) and diastolic blood pressure ( $\beta$  0.49, SE 0.10,  $p < 0.001$ ) than waist circumference.

**Conclusion** BMI and waist circumference had strong correlation with systolic and diastolic blood pressure.

**SP1-15 KNOWLEDGE, ATTITUDES AND FUNCTION OF WOMEN REFERRED TO HEALTH CENTRES IN FASA: A SURVEY OF BREAST CANCER AND SELF-EXAMINATION IN 1388 [2009/2010]**

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**Introduction** According to studies in Iran the incidence of breast cancer in women is increasing and it is the most prevalent cancer in women. We considered the role of self-examination and clinical inspection in order to facilitate the early detection of breast cancer and any associated reduction in mortality.

**Methods** This research was carried out in women referred to health centres in Fasa town. Clustered sampling was used and 300 of women were surveyed. Data collection included: age, level of education, marital status, job, family history of breast cancer, sources of information about signs of breast cancer, and information about the correct way of self-examination of breast and its importance.

**Results** 300 women were examined. The average age was 30 years (mode 25–30). The majority were married housewives and their education was below diploma. 40% of them knew about breast cancer and self-examination. 10% had a neutral attitude towards breast self-examination. 50% had poor function, however, as knowledge increased function also increased. Degree of knowledge was not associated with attitude.

**Conclusion** Most women had poor knowledge about breast cancer and poor function in self-examination. Our findings suggest it is important to focus on increasing women's knowledge levels and their ability to undertake breast self-examination.

**SP1-16 ASSOCIATION BETWEEN PSYCHOLOGICAL AND NUTRITIONAL PARAMETERS IN PATIENTS UNDERGOING PERITONEAL DIALYSIS**

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**Introduction** The incidence and prevalence of end-stage kidney disease has reached epidemic proportions in Brazil and worldwide,

leading to high mortality. In these patients, nutritional status is associated with poorer quality of life (QoL) and health and few studies have been conducted on the subject in Brazil.

**Objective** Investigate the association between psychological and nutritional parameters in patients undergoing peritoneal dialysis. This is a retrospective study of 45 patients attended at the Dialysis Unit of the Clinical Hospital of Botucatu Medical School (UNESP): 58% women, mean age of 53.5 years-old, on dialysis for at least 6 months, 69% using Automatic Peritoneal Dialysis and 63% non-diabetic. For cognitive evaluation, the Mini-Mental State Examination (MMSE) was used and for QoL evaluation, the SF-36; for nutritional assessment, anthropometric and biochemical measurements, dietary recall and bioelectrical impedance analysis were performed.

**Results** Using Pearson's correlation, significant positive correlations were verified between the MMSE score and caloric and protein intake and percentage of intracellular water, and negative correlations for creatinine clearance and age; serum albumin correlated positively with the following QoL domains: physical functioning, general health, vitality, mental health and physical, social and emotional aspects; inflammatory status, measured by PCR, was negatively correlated with physical aspects and general health. In multivariate analysis, the phase angle was positively correlated with functional capacity, pain, emotional aspects and mental health.

**Conclusion** The association between nutritional and psychological aspects reaffirms the importance of nutritional and psychological care and the need for multidisciplinary care in this population.

**SP1-17 INFLUENCE OF PHYSICAL ACTIVITY INTENSITY ON ANTHROPOMETRIC INDEX AND SERUM URIC ACID CONCENTRATION IN PEOPLE WITH OBESITY**

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**Introduction** Physical activity (PA) is considered important in the prevention and treatment of obesity and hyperuricemia. However, scarce evidence exists regarding the influence of PA intensity on anthropometric indices and serum uric acid in people with obesity.

**Methods** We sampled middle-aged men with obesity and/or abdominal obesity who were employees in silicon wafer manufacture and participated in a health check-up. We examined PA using an uniaxial accelerometer, as well as measuring aerobic fitness using an electric bicycle ergometer. PA was defined as light- (<3 metabolic equivalents (METs)), moderate (3–6 METs), and vigorous (>6 METs). Overall METs calculated by adding the time spent at each intensity levels.

**Results** 71 mean took part, mean age 47.2±4.4 years. Aerobic fitness index of lactate threshold was inversely correlated with uric acid ( $r = -0.26$ ,  $p = 0.033$ ), but this became non-significant after adjustment for potential confounding factors (age, BMI, drinking). Light-intensity PA was inversely associated with BMI and waist circumference, even after adjustment for age and drinking (BMI  $\beta = -0.543$ ,  $p = 0.023$ ; waist circumference  $\beta = -1.333$ ,  $p = 0.016$ ). Both light and vigorous intensity PAs were not related to uric acid level, whereas moderate intensity PA was inversely correlated with the circulating uric acid and this remained significant, even after adjustment for age, BMI, and drinking ( $\beta = -0.222$ ,  $p = 0.036$ ).