

causal effect of early age maturation on overweight. Also, there is no explanation for the gender effect.

P2-56 PREVALENCE, AWARENESS, AND CONTROL OF HYPERTENSION AMONG POPULATION AGED OVER 40 YEARS IN MONGOLIA: A BASELINE SURVEY OF MONCOHORT STUDY

doi:10.1136/jech.2011.142976h.91

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Introduction Hypertension is an important public health problem in Mongolia with a rapidly increasing incidence and deaths noted during the last several years. This study estimates the prevalence and control of hypertension among rural and urban population in Mongolia.

Methods A nationwide cross-sectional study was conducted using stratified multistage sampling. Two blood pressure measurements were obtained using a standardised mercury sphygmomanometer. Information on history of hypertension was obtained using a standard questionnaire. Hypertension was defined as mean systolic and diastolic BPs at >140 mm Hg and >90 mm Hg, and/or self-reported current use of antihypertensive medication, previous diagnosis.

Results A total of 2280 people aged over 40 years were examined (response rate 93.5%). Overall, 63.8% of study population had hypertension. Around 11% were newly diagnosed whereas 55.4% were aware of their hypertension. Prevalence of hypertension significantly increased with age ($p=0.0001$). In addition women were more likely to be aware of their disease and to be on treatment compared to men. People who are aware of their hypertension were significantly more likely to quit smoking compared to those who are newly diagnosed and who are non-hypertensive (22.0%, 6.7% and 11.8%, p). In addition they were more likely to reduce consumption of alcohol (alcohol consumption 56.7%, 65.1% and 64.6%, $p=0.001$) to be on diet (29.2%, 5.3% and 2.6%, $p=0.0001$), and reducing their weights (17.1%, 5.3% and 0%, $p=0.0001$).

Conclusions Hypertension is highly prevalent among population aged over 40 years. Hypertensive people who are aware of their disease were more likely to reduce their risk behaviours and to promote healthy lifestyles.

P2-57 DIABETES, OBESITY AND SOME RISK FACTORS AMONG ADULTS IN MONGOLIA: A NATIONWIDE CROSS-SECTIONAL SURVEY

doi:10.1136/jech.2011.142976h.92

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Introduction To determine the population-based prevalence of diabetes, impaired fasting glucose (IFG), obesity and non-communicable disease risk factors in Mongolia.

Methods A national sample involving 2280 participants aged ≥ 40 years were examined in a cross-sectional survey conducted in 2009. The WHO diagnostic criteria were used to determine the prevalence of diabetes, IFG and obesity. Serum samples were tested for cholesterol, triglyceride and lipoproteins.

Results Around 55% of the participants were enrolled from capital-Ulaanbaatar city, 30.1% were from rural soums of different geographical regions and the remaining was residing in the province centers (response rate was 93.5%). The diabetes prevalence was 8.0%, and an additional 7.4% had IFG. Prevalence of diabetes in the

city, province centers and rural soums was 9.8%, 6.4% and 5.5% with the significantly highest rate in the city ($p=0.012$). The prevalence of diabetes among population aged over 40 years was 8.3% in men and 7.8% in women. The prevalence of overweight, obesity and central obesity was 37.4%, 26.9% (overall 64.3%) and 63.6%, respectively. Among study population the rates of abnormal triglyceride, cholesterol, and high and low density lipoprotein rates were 14.1%, 16.2%, 28.2%, and 14.0%, respectively. Overall smoking and alcohol consumption rates were 24% and 60.3%, with significant higher use among men compared to women. In general, diet, smoking, alcohol consumption and physical activity were different by age and residence.

Conclusions Mongolia has a rapidly rising prevalence of diabetes and obesity. Central obesity is strongly correlated with adverse health outcomes. In addition unhealthy behaviours are emerging in the adult population.

P2-58 UNHEALTHY LIFESTYLE PATTERNS ASSOCIATED WITH WAIST CIRCUMFERENCE AMONG ADOLESCENTS: A SCHOOL BASED SURVEY

doi:10.1136/jech.2011.142976h.93

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Objective To analyse patterns of lifestyle is associated with abdominal obesity in Brazilian adolescents (14–18 years old).

Methods This school-based survey was carried out among high school students from Maringá/PR/Brazil, (2007) selected through two-stage random sampling. The sample included 991 (54.5% girls) students. The outcome used was waist circumference (WC). The lifestyle variables used were: physical activity; sedentary behaviour and eating behaviour (number of meals per day; frequency of weekly consumption of soda). The multiple linear regression models were fitted to assess the relationship between WC and lifestyle patterns. Analyses were stratified by sex. Statistical significance was adopted α 5%.

Results The mean waist circumference (cm) for girls and boys was 77.3 and 80.4, respectively, ($p<0.001$). However, girls had higher prevalence of abdominal obesity than boys, 36.3% vs 28.4%, respectively, ($p<0.001$). The boys had a higher level of physical activity than girls, 436 min/wk against 353 min/wk, ($p=0.003$), and the girls have higher sedentary behaviour, 7.1 h/d compared to 5.9 h/d, ($p<0.001$). The daily consumption of soda was positively associated with WC in both sexes, $\beta=0.56$ ($p=0.041$) for girls and $\beta=0.81$ ($p=0.038$) for boys. And negatively associated between number of daily meals and WC, $\beta=-1.52$ ($p<0.001$) for girls and $\beta=-1.07$ ($p=0.011$) for boys.

Conclusion The higher prevalence of abdominal obesity, the lifestyle patterns are different between girls and boys and that eating habits are directly associated with waist circumference independent of sex.

P2-59 ASSOCIATION OF BODY MASS INDEX AND FRUIT JUICE INTAKE IN 27 BRAZILIAN CITIES

doi:10.1136/jech.2011.142976h.94

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Introduction Fruit juice intake has been associated with weight gain in children and adolescents; however literature regarding this association in adults is scarce.