MENTAL HEALTH AND SMOKING AMONG ADOLESCENTS FROM A COHORT IN SOUTHERN BRAZIL

doi:10.1136/jech.2011.142976j.22


Background Smoking is one of the major risk factors for various diseases. There is some evidence that smoking is associated with mental health problems.

Objective To evaluate the association among mental health problems and smoking in teenagers at 15 years old in a population-based birth cohort.

Methods 4525 adolescents from the 1993 birth cohort, from the city of Pelotas, southern Brazil, were examined. Smoking was defined as to have smoked one or more cigarettes in the previous 30 days. Mental health was assessed according to the total score of the questionnaire Strengths and Difficulties Questionnaire being considered as positive when the score was ≥20 points. Data were analysed using Poisson regression with adjustment for robust variance.

Results Smoking prevalence was 6.0% and about 30% of the adolescents presented any problem related to mental health. In the crude analysis, the prevalence ratio to present mental health problem was 3.3 (95% CI 2.5 to 4.2) and after the adjusted analysis (for sex, age, skin colour, family income, maternal education, smoking among friends, employment in the last year, school failure, physical activity at leisure and experimental use of alcohol) it decreased to 1.9 (95% CI 1.2 to 2.3) among smokers compared to non-smokers.

Conclusion We concluded that mental health problems in adolescence may be related to tobacco consumption.

PROSPECTIVE STUDY OF ALBUMINURIA ON CARDIOVASCULAR DISEASE MORTALITY AND MORBIDITY IN THE GENERAL POPULATION

doi:10.1136/jech.2011.142976j.23

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Introduction Albuminuria predicts cardiovascular disease (CVD) in people with diabetes mellitus. However, few studies have been carried out in the general population.

Methods A total of 5260 participants aged ≥40 years from worksites in New Zealand were interviewed between 1988 and 1990. Participants were followed for up to 19 years. First CVD events were recruited during 2004–2011. Microalbuminuria was defined using ICD-9 and ICD-10 coding. Early morning urinary albumin levels of 30–300 mg/l were classified as microalbuminuric (n=249) and those above 300 mg/l as proteinuric (n=25). CVD events were monitored as all-cause mortality and CVD morbidity.

Results Microalbuminuria was associated with increased hazards rates for all CVD events, all-cause mortality, CVD morbidity and mortality in the total population and after excluding participants with diabetes. Microalbuminuria was only associated with increased HRs for all CVD events (Abstract P2-188 table 1). Similarily, proteinuria was only associated with increased HRs for all CVD events and mortality (Abstract P2-188 table 1). HRs remained significant after further adjusting for body mass index, lipids and hypertension.

PREVALENCE AND PATTERNS OF ALCOHOL CONSUMPTION IN CHINESE MEN AND WOMEN: THE KADOORIE BIOBANK STUDY OF 0.5 MILLION PEOPLE IN CHINA

doi:10.1136/jech.2011.142976j.24

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Introduction Diet, lifestyle and disease patterns vary greatly from one part of China to another. Data on the prevalence and patterns of alcohol consumption in different parts of China are limited.

Methods Self-reported questionnaire data from the Kadoorie Biobank Study were used to describe the prevalence and patterns of alcohol consumption in 500 000 men and women aged 30–79 years, recruited during 2004–2008 from 10 geographically diverse urban and rural areas of China.

Results 76% of men and 35% of women were current alcohol drinkers, with 53% of men and 2% of women drinking at least weekly. In men, the prevalence of weekly drinking varied by sevenfold between areas (from 7% to 51%, age-adjusted), and was highest at age 40–49 years, among those with no formal education, and among regular smokers and tea-drinkers. Among weekly drinkers, the estimated median consumption was 244 g/week in men and 68 g/week in women. Most alcohol consumption involved strong spirits, although this varied somewhat by area and there was a trend towards increased beer consumption among younger people. In male drinkers, 57% (12% of all men) reported regular binge drinking (ie, >60 g alcohol in one session), and the prevalence was highest in younger men. Most drinkers (86%) usually drank with meals, and a fifth reported flushing/dizziness after drinking.

Conclusion The prevalence and pattern of drinking in China show strong regional and socio-demographic variation. The health-related effects of alcohol consumption among study participants are now being monitored.
Objective This study aims to describe the relationship between body mass index (BMI) and blood pressure in three distinct Peruvian populations.

Methods Three population groups were recruited: Rural (born and remained in Ayacucho), Migrant (born in Ayacucho and migrated to Lima), and Urban (born in Lima). Systolic blood pressure (SBP) and diastolic blood pressure were measured using oscillometric devices (Omron M5-i, Japan) and standardised techniques. BMI was calculated from standardised measurements. ANOVA was used to test differences between groups. Multi-variable linear regression was used to describe the relationship between BMI and blood pressure, adjusting for potential confounders.

Results SBP was similar in the rural (120.9 ±18.7) and migrant groups (119.9 ±16.4), but higher in the urban group (128.2 ±22.9). BMI was significantly lower in the rural group (23.2 ±2.7), but similar in the migrant (27.0 ±4.3) and urban groups (28.3 ±5.4). There was a positive relationship between BMI and SBP (slope 0.81; 95% CI 0.59 to 1.03) after adjustment for age, sex, height and haemoglobin. A positive relationship was observed in urban residents (0.61; 0.04–1.18), but the gradient of the relationship was steeper in the migrant group (0.75, 0.48–1.02). Similar results were found for diastolic blood pressure.

Conclusions The relationship between BMI and blood pressure differed between our three study populations, with blood pressure rising at lower values of BMI in migrants. Migrant population in transitional countries may be at greater risk of developing hypertension, and the effect of BMI as a predictor is not uniform in migrant and urban-born residents.

Conclusions The study thus concludes that the area of residence is a more powerful determinant associated with cardiovascular risk factors as compared to social class in Pakistani population.

Introduction There is no applicable model for identifying the metabolic syndrome in adolescent populations. The aim of this study was to identify the most components of risk variables associated with metabolic syndrome in Iranian adolescents.

Methods Anthropometry, blood pressure and biochemical measurements were assessed in a population-based study of 1307 Iranian adolescents (563 boys and 744 girls) aged 8–11 years in two phases, 1999–2001 and 2003-2007. Exploratory and confirmatory factor analysis was conducted using SPSS version 15.

Results A two-factor structure was identified accounting for 55.8% and 53.8% of variance for boys and girls, respectively. The factor loadings for boys (and girls) in study round one two were 0.87 (0.54), 0.88 (0.82), 0.67 (0.65), 0.75 (0.8) and –0.80 (0.81) for systolic blood pressure (SBP), diastolic BP, waist circumference (WC), triglycerides (TG) and high-density lipoprotein (HDL) respectively. In phase two, the factor loadings for boys (and girls) were 0.74 (0.86), 0.76 (0.83), 0.72 (0.43), 0.75 (0.74), −0.72 (−0.77) for SBP, DBP, WC, TG and HDL, respectively. Fasting blood sugar had a loading factor of 0.47 only in boys in study round two. The two-factor model fit the data significantly in both study rounds by sex (Comparative fit index: 0.77–0.97).

Introduction Prevalence of obesity and related risk factors, recognised as Metabolic Syndrome (MetS), are in influence by environmental factors including diets and physical activities, which immigrant study can show evidence.

Objectives To assess prevalence of obesity and its related risk factors among Japanese immigrant population in South Brazil compared with representative Japanese data in Japan.

Methods In August 2010, from 12 scattered colonies of Japanese immigrants in Santa Catalina and Rio Grande do Sul States, in Brazil, 274 immigrants were recruited. MetS was determined, according to Japanese Guideline, waist circumference 85 cm or over for males and 90 cm or over for females, with at least 2 accumulated related risk factors such as hypertension, high blood sugar, high triglyceride and low HDL cholesterol. Prevalence were compared than rural dwellers after multivariate adjustments for age, gender, BMI and social class.

Conclusions The study thus concludes that the area of residence is a more powerful determinant associated with cardiovascular risk factors as compared to social class in Pakistani population.