## P2-23 CONTEXTUAL FACTORS ASSOCIATED WITH SMOKING AMONG BRAZILIAN ADOLESCENTS

doi:10.1136/jech.2011.142976h.59

<sup>1</sup>S M Barreto,\* <sup>1</sup>L Giatti, <sup>2</sup>L Casado, <sup>4</sup>L Moura, <sup>3</sup>C Crespo, <sup>1,4</sup>D Malta. <sup>1</sup>Universidade Federal de Minas Gerais, Belo Horizonte, Minas Gerais, Brazil; <sup>2</sup>Instituto Nacional do Cancer, Rio de Janeiro, Rio de Janeiro, Brazil; <sup>3</sup>Instituto Brasileiro de Geografia e Estatistica, Rio de Janeiro, Rio de Janeiro, Brazil; <sup>4</sup>Ministèrio da Saude, Brasilia, Distrito Federal, Brazil

**Background** Very few studies have examined the role of school, household and family contexts on youth smoking in middle-income countries.

**Methods** This work describes smoking exposure among 59 992 high school students who took part in the Brazilian Survey of School Health and investigates contextual factors associated to regular smoking, defined as smoking cigarettes at least 1 day in past 30 days. Explaining variables were grouped into: *sociodemographic characteristics, school context, household context and family rapport.* Variables independently associated with smoking in each context were identified by multiple logistic regression.

Results 53% were female, 89% were aged 13-15 years. 24% had already experimented cigarettes, 50% before the age of 12 years. Prevalence of regular smoking was 6.3% (95% CI 5.87 to 6.74), with no sex variation. Smoking was not associated with mother's education or index of household assets. In the multivariable analysis, studying at private school, possibility of purchasing cigarettes at school and skipping classes without parent's consent increased the chance of smoking. In the household context, living with both parents was negatively associated with smoking, while having smoking parents and exposure to other people's smoking was positively related to smoking. In the family rapport, parental unawareness of what the adolescent was doing increased smoking, but having meals with the mother one or more days per week and parents' negative reactions to adolescent smoking were protective. Conclusion Results reinforce the roles of school, household and family contexts on youth' smoking behaviours and help to adjust public health policies aimed at adolescents.

## P2-24 SLEEP DURATION PATTERN AND CHRONIC DISEASES IN BRAZILIAN ADULTS (ISACAMP, 2008/09)

doi:10.1136/jech.2011.142976h.60

M G Lima, P B Francisco, M B A Barros.\* State University of Campinas, UNICAMP, Campinas, São Paulo, Brazil

**Objective** The aim of the present study was to assess the sleep patterns of the adult population of the city of Campinas (Brazil) according to socioeconomic and demographic variables and to chronic diseases and symptoms.

**Methods** A population-based cross-sectional study was conducted using data from the Campinas Health Survey (ISACAMP-2008-09) carried out in 2008 and 2009. A total of 2637 individuals aged 18 years or more, obtained from a probabilistic sample, were analysed. Associations between sleep pattern and the independent variables were determined using the  $\chi^2$  test. Multinomial logistic regression models were used to adjust for confounders.

**Results** The prevalence of six or fewer hours of sleep was greater among individuals aged 40 years or older and among divorced. The prevalence of sleeping nine or more hours was higher among those with <40 years of age, divorced or single, with the lower level of schooling, who did not work and among housewives. The prevalence of short and long sleep duration was greater among individuals with heart disease, vascular problems, rheumatism/arthritis/ arthrosis, osteoporosis or emotional problems. The prevalence of short sleep duration was greater among individuals with back problems and those with three or more health conditions. There was a strong relation between sleep duration and sleep quality.

**Conclusions** Socio-demographic factors and the presence of health diseases were associated to sleep duration and this question should be considered in the health promotion concerns.

## P2-25 TRENDS AND SOCIAL INEQUALITIES ON CHRONIC DISEASES IN BRAZILIAN POPULATION: PNAD, 2003–2008

doi:10.1136/jech.2011.142976h.61

<sup>1</sup>M B de Azevedo Barros,\* <sup>1</sup>P M B Francisco, <sup>1</sup>L M Zanchetta, <sup>2</sup>C L G Cesar. <sup>1</sup>State University of Campinas - Medical School, Campinas, São Paulo, São Paulo, Brazil; <sup>2</sup>University of São Paulo - Faculty of Public Health, São Paulo, São Paulo, Brazil

**Introduction** National Health Surveys provide essential data to monitoring health conditions and the magnitude of health inequalities. The aims of this study were to evaluate the 2008 prevalence of chronic diseases in Brazilian population comparing to 2003 data and to measure the social inequalities on the prevalence of the surveyed diseases according to educational strata.

**Methods** Data were obtained from the Brazilian National Survey (PNAD - health supplement) carried out on 2003 (sample of 384764 individuals) and 2008 (sample size of 391868). Prevalence and adjusted prevalence ratios were estimated using Poisson Multiple Regression with svy commands of Stata v.11.

**Results** The prevalence of at least one disease was significantly higher in: elders, women, low schooling level, black or indigenous people, urban residents, migrants and people living in the south region of Brazil. The most frequent diseases were: back and spinal cord disorders (13.5% considering all age groups), hypertension (14.0%), arthritis (5.7%) and depression (4.1%). Between 2003 and 2008 it was observed a significantly increase on the prevalence of diabetes, hypertension, cancer and cirrhoses, and a reduction on prevalence of chronic kidney failure and tuberculosis. All the 12 analysed diseases, with the exception of cancer and tendinitis/ tenossinovitis, showed significant higher prevalence on low educational level strata. The larger social inequalities were observed for chronic kidney failure (PR=2.11), cirrhoses (PR=2.74), tuberculosis (PR=1.74) and arthritis/rheumatism (PR=1.51).

**Conclusion** The pattern of chronic conditions is changing in the Brazilian population but the health social inequalities persist as an important national challenge.

## P2-26 SMOKING AND MORTALITY IN OLD AGE: 12-YEAR FOLLOW-UP OF 7000 MEN IN THE WHITEHALL RESURVEY

doi:10.1136/jech.2011.142976h.62

<sup>1</sup>N Bhala,\* <sup>1</sup>J Emberson, <sup>2</sup>M Shipley, <sup>3</sup>D Leon, <sup>1</sup>R Clarke. <sup>1</sup>Clinical Trial Service Unit & Epidemiological Studies Unit (CTSU), University of Oxford, Oxford, UK; <sup>2</sup>Department of Epidemiology and Public Health, University College London, London, UK; <sup>3</sup>London School of Hygiene & Tropical Medicine (LSHTM), London, UK

**Introduction** We sought to assess the strength of associations of smoking with cause-specific mortality in older men.

**Methods** In a prospective study of surviving participants of the Whitehall study of male civil servants recruited in 1967–1970, 7044 were resurveyed in 1997-1998 (mean age 77 years; range 66–97) and followed for cause-specific mortality. HRs in relation to smoking habits in old age were estimated using Cox proportional hazards models after adjustment for age, prior disease and last known employment grade.

**Results** At resurvey, 14% of men were current-smokers, 58% were former-smokers and 23% were never-smokers (the remaining 5% reported being a never-smoker in the resurvey, but not in the initial survey). During median follow-up in survivors of 12.5 years, there were 4373 deaths (72/1000/year), of which 1838 were from