

**P2-409** PRE-PREGNANCY BODY MASS INDEX AND SPONTANEOUS PRETERM BIRTH IN NORTHWEST RUSSIA: A REGISTRY-BASED STUDY

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**Introduction** International studies on this topic yield controversial results. No studies from Russia have been published. We contribute by studying associations between maternal pre-pregnant BMI and the risk of spontaneous preterm birth in Northwest Russia.

**Methods** A historical cohort study using the data of the Murmansk County Birth Registry. All spontaneous singleton births in the county in 2006–2008 were included (n=23 527). All women were categorised as underweight (<18.5 kg/m<sup>2</sup>), normal (18.5–24.9 kg/m<sup>2</sup>), overweight (25.0–29.9 kg/m<sup>2</sup>), and obese (≥30.0 kg/m<sup>2</sup>). Crude and adjusted associations between pre-pregnant BMI and risk of spontaneous preterm birth (<37 completed weeks) were estimated by logistic regression analyses.

**Results** In total, 7.5% (95% CI 7.2 to 7.9) of all spontaneous births were preterm. The prevalence of preterm birth according to the mother's BMI was 7.3% (95% CI 6.9 to 7.7) for normal weight, 7.6% (95% CI 6.4 to 8.9) for underweight, 8.2% (95% CI 7.4 to 9.1) for overweight and 8.3% (95% CI 7.0 to 9.6) for obese women. The risk of spontaneous preterm birth was increased in overweight women compare to normal weight mothers (crude OR 1.15, 95% CI 1.13 to 1.31). After adjustment for marital status and education, increased risks of preterm delivery were found in both overweight (OR 1.18, 95% CI 1.04 to 1.34) and obese women (OR 1.21, 95% CI 1.00 to 1.45). Further adjustment for age, parity, infant sex, smoking and alcohol abuse, reduced the associations to non-significant level.

**Conclusion** Overweight and obesity are associated with preterm birth in Northwest Russia, but only before adjustment for biological factors. More detailed analyses of causal pathways are warranted. Potential mechanisms will be discussed.

**P2-410** FACTORS ASSOCIATED WITH ALCOHOL USE AND ABUSE IN RURAL COMMUNITY IN THE CITY OF RIO DE JANEIRO, BRAZIL

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This study aimed to evaluate factors associated with use and alcohol abuse among the 1115 individuals from a rural community with coverage of the Family Health Strategy in Rio de Janeiro, Brazil. In this survey was descriptive analysis and multiple linear regression analysis. The mean score of consumption, measured by the AUDIT, was 3.8 (range 1–20, SD ±6.08). Multiple regression analysis showed that the factors that best explained the variability of alcohol consumption were sex (p=<0.001), age (p=0.113), family income (p=0.052), education (p=0.382), and State Civil (p=0.974), with a coefficient of determination equal to 0.399. In another analysis, excluding the variable marital status, the variables associated with alcohol consumption were sex (p=<0.001), age (p=0.113), family income (p=0.05) and education (p=0.380) with the coefficient of determination equals 0.419. The results identified issues to be considered in developing measures to protect health, with emphasis on controlling alcohol use and harm reduction.

**P2-411** THE RURAL-URBAN DIFFERENCES AND ABUSE OF ALCOHOL USE IN THE CITY OF RIO DE JANEIRO, BRAZIL

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Cross-sectional study involving 1115 individuals from rural and urban areas of Rio de Janeiro, Brazil, whose aim was to evaluate the effect of urbanisation of place of residence in the quantitative standard of alcohol consumption. We used logistic regression for multivariate analysis, considering the potential confounders age, age, education, income and marital status. The reasons and likely derived from the bivariate analysis, considering the first category as reference were: sex (OR=2.254, 95% CI 1.69 to 3.01), age group (OR=1.59, 95% CI 1.07 to 2.36), schooling (OR=2.80, 95% CI 0.51 to 15.4) Income (OR=2.88, 95% CI 1.42 to 5, 83), status (OR=1.40, 95% CI 1.03 to 1.90), Urbanisation (OR=1.07, 95% CI 0.75 to 1.54). In the multivariate model, the adjusted OR of association between urbanisation of the area and alcohol consumption was 0.95 (95% CI 0.63 to 1.43). The urbanisation of place of residence and therefore does not increase the risk of alcohol consumption, in quantitative terms. Health policies should therefore investigate the quality of alcohol consumed, in order to achieve the effect of addiction and work risk factors for risk reduction.

**P2-412** TEMPORAL TRENDS OF TUBERCULOSIS AND TB/HIV CO-INFECTION IN BRAZIL AND GLOBALLY, 1996–2008

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**Background** Tuberculosis (TB) represents a major challenge for Brazil and the world, especially because of the presence of pockets of poverty and coinfection with TB/HIV. The aim of the study is to analyse the trend of prevalence, incidence and mortality of tuberculosis cases, associated or not with HIV in Brazil and worldwide.

**Materials and Methods** We used data on prevalence, incidence and mortality from tuberculosis, with or without HIV co-infection, obtained by the WHO, from 1996 to 2008, referring to Brazil and the world. The trends were estimated by linear regression.

**Results** The data suggest a reduction in the prevalence of and mortality from TB both in Brazil and worldwide, with more marked reduction in Brazil. However, TB incidence is falling in Brazil while increasing worldwide. There were increasing rates of incident TB/HIV.

**Conclusion** Social inequality, population ageing, migration, the emergence of multidrug-resistant strains and the advent of AIDS are the main causes aggravating the current TB situation. In this context, methodological approaches for assessing TB surveillance actions are welcome because they can identify situations where the TB notification data are different from the true incidence of this disease.

**P2-413** ASSESSMENT OF REFRACTIVE ERRORS AND COLOUR VISION BY VISION SCREENING AMONG SCHOOL CHILDREN IN SHIMLA DISTRICT OF NORTH INDIA

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**Introduction** WHO introduced the global initiative for the elimination of avoidable blindness by the year 2020 known as “Vision