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

doi:10.1136/jech.2011.142976l.39

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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/m²), normal (18.5–24.9 kg/m²), overweight (25.0–29.9 kg/m²), and obese (>30.0 kg/m²). 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 7.5% (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 8.5% (95% CI 7.0 to 9.6) for obese women. The risk of spontaneous preterm birth was increased in overweight women compared to normal weight mothers (crude OR 1.15, 95% CI 1.13 to 1.31). After adjustment for maternal status and education, increased risks of preterm delivery were found in both overweight (OR 1.18, 95% CI 1.04 to 1.54) and obese women (OR 1.21, 95% CI 1.05 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

doi:10.1136/jech.2011.142976l.40

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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

doi:10.1136/jech.2011.142976l.41

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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, 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=2.38, 95% CI 1.42 to 3.83), 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 0.65 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.


doi:10.1136/jech.2011.142976l.42

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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

doi:10.1136/jech.2011.142976l.43

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Introduction WHO introduced the global initiative for the elimination of avoidable blindness by the year 2020 known as "Vision 2020: Enabling Sight". The mission of Vision 2020 is to make sure that every child will be able to see by the year 2010. This initiative was launched by WHO to identify the main causes of blindness and to develop a global strategy for eliminating avoidable blindness by 2020.

This initiative is supported by efforts to prevent blindness, promote the use of vision screening and promote blindness education. In India, the Indian Council of Medical Research (ICMR) and the National Programme for Control of Blindness (NPCB) play a significant role in the development of vision screening programs. These programs aim to identify children with refractive errors and color vision deficiencies at an early stage, enabling timely intervention and treatment. Vision screening is a cost-effective method to identify children who require further evaluation, thus ensuring that they receive appropriate care and treatment.

This study was conducted to assess the prevalence of refractive errors and color vision deficiencies among school children in Shimla district of Himachal Pradesh, India. The study was carried out in 10 government schools, including both primary and secondary levels. A total of 1200 children between the ages of 5 and 18 years were selected for the study. The children were screened using standardized vision screening tests, including the Snellen chart for distance vision and the Ishihara plates for color vision.

The results indicated a high prevalence of refractive errors, with 78% of the children having a refractive error of at least -0.50 diopters. The most common types of refractive errors were myopia and astigmatism. Regarding color vision, 12% of the children had a color vision deficiency, mostly affecting the ability to distinguish red from green. These findings highlight the importance of early detection and intervention to prevent avoidable blindness.

The study also helped in identifying the need for more focused efforts in the prevention and treatment of refractive errors and color vision deficiencies among school children in Shimla district. The findings underscore the importance of Vision 2020 and other similar initiatives in addressing the challenges of avoidable blindness and promoting healthy vision for all children.