NEWSPAPER 1 HEPAHITIS B VIRUS (HBV) INFECTION IN RELATION TO CONSISTENT CONDOM USE: A POPULATION-BASED STUDY IN PERU

doi:10.1136/jech.2011.142976f.87

1A Bernabe-Ortiz, 1C Carcamo, 2J Scott, 2J Hughes, 1P Garcia, 1K Holmes. 1Universidad Peruana Cayetano Heredia, Lima, Peru; 2University of Washington, Seattle, Washington, USA

Introduction Data on hepatitis B virus (HBV) are limited in developing countries. The study goal was to evaluate the prevalence and factors associated with HBV infection in Peru, highlighting its relationship with consistent condom use.

Methods Data from two different surveys performed in 28 mid-sized Peruvian cities were used. Participants aged 18-29 years were selected using a multistage cluster sampling. Information was collected through a validated two-part questionnaire. The first part (face-to-face) concerned demographic data, while the second part (self-administered using handheld computers) concerned sexual behaviour. Hepatitis B core antibody (anti-HBc) was tested in 7000 blood samples. Prevalences and associations were adjusted for sample strata, primary sampling units and population weights.

Results Anti-HBc prevalence was 5.0% (95% CI 4.1% to 5.9%), with the highest prevalence among jungle cities: 16.5% (95% CI 13.8% to 19.1%). Anti-HBc positivity was associated with geographic region (highlands OR=2.05; 95% CI 1.28 to 3.27, and jungle OR=4.86; 95% CI 3.05 to 7.74; compared to coastal region); and age at sexual debut (OR=0.90; 95% CI 0.85 to 0.97). Consistent condom use was associated with lower prevalence (OR=0.34; 95% CI 0.15 to 0.79) after adjusting for sex, geographic region, education level, lifetime number of sex partners, and age at sexual debut.

Conclusion Residence in highlands or jungle cities is associated with higher anti-HBc prevalences, whereas increasing age at sexual debut was associated with lower prevalences. Consistent condom use was associated with decreased risk of anti-HBc. These findings emphasise the need of vaccination especially in jungle population, and imply that condom use promotion might be a strategy to prevent HBV infection.

NEWSPAPER 2 VALIDATION OF A QUESTIONNAIRE TO ASSESS PHYSICAL ACTIVITY IN CHILDREN

doi:10.1136/jech.2011.142976f.89

1R Bielemann, 2F Reichert, 3V Paniz, 1D Gigante. 1Post-Graduate Program in Epidemiology, Federal University of Pelotas, Pelotas, Rio Grande do Sul, Brazil; 2Post-Graduate Program in Physical Education, Federal University of Pelotas, Pelotas, Rio Grande do Sul, Brazil; 3Post-Graduate Program in Population Health, University of Vale do Rio do Sinos, São Leopoldo, Rio Grande do Sul, Brazil

Background Subjective instruments for physical activity assessment in children have particularities, and to assess the reliability of these instruments is crucial. The aim of this study was to determine the validity of the Netherlands Physical Activity Questionnaire (NPAQ).

Methods Population under study was Brazilian children aged 4 to 11 years old. Data collection took place by application of the NPAQ through face-to-face interviews with mothers’ children and utilisation of GT1M Actigraph accelerometers by five consecutive days as the reference method. Validity analyses were performed by correlation coefficient, sensibility and specificity, as well ROC curve.

Results Two hundred and thirty nine children participated of the study. The prevalence of physical activity was 73.2%. The mean and median of the NPAQ score were 25.5 and 26, respectively. Based on the area under the ROC curve, the median value presented the best indicators of sensibility (59.4%) and specificity (60.9%), and the area under curve was 0.63. The predictive capacity of the NPAQ to identify active children was high regardless the cut-off point chosen. This capacity was even higher from the score of 30 points on. The correlation coefficients between the last question of the instrument and the accelerometer variables were better than those from the rest of the NPAQ.

Conclusions Based on sensibility and specificity values, the NPAQ did not show satisfactory validity. More results of the predictive capacity of the last question will be better explored. Physical activity level of children estimated from questionnaires must be interpreted with cautions.

NEWSPAPER 3 CHANGES IN UTILISATION OF HEALTH SERVICES AFTER REMOVAL OF USER FEES: OBSERVATIONS IN RURAL NEPAL

doi:10.1136/jech.2011.142976f.88

1A Bhutyal, 1A K Poudyal, 1M K Maskey, 1D Adhikari, 1D R Sharma, 1K Bhutyal. 1People’s Health Initiative, Kathmandu, Nepal; 2World Health Organization, Country Office Nepal, Kathmandu, Nepal; 3Department of Community Medicine and Family Health, Institute of Medicine, Tribhuvan University, Kathmandu, Nepal; 4Nepal Public Health Foundation, Kathmandu, Nepal; 5Independent medical doctor, New York, USA

Introduction Nepalese society is divided across hierarchical strata of gender, ethnicity and economic class, with women, ascribed “lower caste” and poor people placed at the bottom of society. Since 2007, the ministry of health and population removed user fees in primary health services in an attempt to increase use of the services, particularly among underserved population.

Methods Records of 1850 health services users were selected randomly from peripheral facilities—district hospital, primary healthcare centre, and 4 (of 8) health posts—of Jumla—a rural mountain district. Proportions of health services use by privileged and underprivileged ethnicities, men and women, and rich and poor people, before and after user fee removal, were calculated. Semi-structured interviews were conducted among health services users, management staff, and representatives of donors and NGOs working in the district.

Results After fee removal, use of health services by women, underprivileged ethnicities, and poor people increased by 2.4%, 6.8% and 9.2% respectively. However, users and providers had conflicting opinions over the delivery of free health services. There was no evidence to establish the role of health system related confounders, however, it was suspected that ongoing process of state democratization may have influenced the observed changes.

Conclusion Removal of user fees and subsequent increase in health services use by marginalised people as compared to their privileged counterparts is encouraging. However, some impediments still remain, which can be overcome by improving the delivery system with a focus on smoothing user-provider interactions.

NEWSPAPER 4 DATING VIOLENCE: PREVALENCE OF PHYSICAL VIOLENCE AND DIRECTIONALITY PATTERN IN TEN BRAZILIAN CITIES

doi:10.1136/jech.2011.142976f.90

1M L Lima, 2S Assis, 3K Njaine, 4A Kelly, 5M Bigras. 1Centro de Pesquisas Aggeu Magalhães, Recife, Pernambuco, Nordeste, Brazil; 2Escola Nacional de Saúde Pública-FIOCR, Rio de Janeiro, Sudeste, Brazil; 3Escala Nacional de Saúde Pública-FIOCR, Rio, Brazil; 4Universidade Federal de Pernambuco, Recife, Pernambuco, Nordeste, Brazil; 5Université du Québec à Montréal, Montréal, Québec, Sude, USA

The study investigates the prevalence and directionality pattern (only male, only female, or both are perpetrators) of physical

J Epidemiol Community Health August 2011 Vol 65 Suppl 1
The aim of this study was to describe the temporal trend and the spatial distribution of mortality from tracheal, bronchial, and lung cancer in Brazil from 1979 to 2004.

Methods Mortality data by gender and geographic region were obtained from the Mortality Database created by the Ministry of Health in 1975. Demographic data were collected from the national censuses, from population counts, and from population estimates made in non-census years. Mortality rates were standardised according to the direct method, and the trends were analysed by gender and geographic region using the Prais-Winsten method for generalised linear regression.

Results Lung cancer mortality accounted for approximately 12% of the overall neoplasia-related mortality during the period. There was a trend towards an increase for both genders and in all regions, except for the male population in the southeast region, whose rates remained steady between 1979 and 2004. The highest rates were observed in the south and southeast regions. However, the northeast region was the one that presented the greatest increase, followed by the central-west and north regions. In all regions, the increase in mortality rates was higher in women.

Conclusion The increase in lung cancer mortality in Brazil between 1979 and 2004 requires public measures that can minimise exposure to risk factors, mainly tobacco, and allow greater access to healthcare facilities for diagnosis and treatment.