P2-499 A SILENT PUBLIC HEALTH CRISIS: THE BURDEN OF UNTREATED CARIES AND DENTAL INFECTIONS IN THE PHILIPPINES NATIONAL ORAL HEALTH SURVEY 2006

doi:10.1136/jech.2011.142976m.26

¹H Benzian, ²B Monse, ³W van Palenstein Helderma. * ¹The Health Bureau Ltd, Haversham, UK; ²Fit for School Inc., Manila, The Philippines; ³Department of Global Oral Health, Radboud University, Nijmegen, The Netherlands

Introduction The 2006 National Oral Health Survey in the Philippines was part of an advocacy strategy for increased attention for the neglected state of child oral health in the country. The survey assessed the oral health status of 6- and 12-yr-old children in a representative national sample.

Methods Survey of 2030 6-yr-old and 2022 12-yr-old children, using WHO Basic Methods (WHOBM 4th edition) and the new PUFA-index. Inclusion of a subsample of 242 12-yr-old children for assessment of backward comparability between the 3rd edition of the WHOBM used in the previous survey (1998) and the 4th edition WHOBM.

Results 97% of 6-yr-old children had caries (mean dmft 8.4, d=8.0, m=0.4, f=0), 85% live with dental infection (mean pufa 3.4) and 20% reported pain when examined. 12-yr-old children had 82% caries prevalence (mean DMFT 2.9, D=2.7, M=0.2, F=0), 56% prevalence of pulp involvement (mean PUFA 1), and 16% reported pain when examined.

Conclusion The burden of dental decay is very high and has remained virtually unchanged since 1998, indicating a complete failure of previous oral health strategies. The differences in methodology between the 1998 and the 2006 surveys were accountable for the difference in DMFT values recorded. Oral health surveys should not be conducted for the sake of surveying, but they should be used in the context of advocacy to address the neglect of oral health. For this, they must include an indicator framework that allows for linkages of the oral health status into the broader sectors of health and development.

P2-500 PSYCHOLOGICAL DISTRESS AND TRAUMATIC DENTAL INJURIES IN ADOLESCENTS FROM EAST LONDON

doi:10.1136/jech.2011.142976m.27

¹E Bernabé, * ²S Stansfeld, ¹W Marcenés. ¹Institute of Dentistry, Barts and The London, Queen Mary University of London, London, UK; ²Wolfson Institute of Preventive Medicine, Barts and The London, Queen Mary University of London, London, UK

Objective To explore the relationship between psychological distress and traumatic dental injuries (TDI) among adolescents.

Methods Phase 3 of Research with East London Adolescents Community Health Survey (RELACHS) collected data in a representative sample of 15–16-year-old adolescents in 2005. RELACHS is a longitudinal secondary school-based epidemiological study that followed up pupils aged 11–12 years in 2001 and 13–14 years in 2003. Adolescents provided information on their demographic characteristics (sex, age and ethnicity), socioeconomic position (parental employment and car ownership), family structure and psychological distress (using the Strength and Difficulties Questionnaire, SDQ). The SDQ contains 25 items equally divided into five subscales: hyperactivity, emotional problems, conduct problems, peer problems and pro-social behaviour. Participants were also clinically examined for TDI, overjet and type of lip coverage. Logistic regression models were fitted to test the associations of SDQ and each subscale with TDI.

Results 975 adolescents participated in the study (67.2% response rate), of whom 886 had information on relevant variables (56.8% females and 74.5% non-White). The prevalence of psychological

distress and TDI were 10% and 16%, respectively. In regression models, being a high scorer on the SDQ was positively related to having TDI (OR: 2.02, 95% CI 1.11 to 3.70) after adjustment for demographic characteristics, socioeconomic position, family structure and oral clinical characteristics. Analysis by subscales showed that only having peer problems was significantly related to having TDI after adjustment for confounders (OR: 2.18; 95% CI 1.09 to 4.34).

Conclusion Psychological distress and especially peer problems play an important role in the occurrence of TDI in adolescents.

P2-501 ACCURACY OF SELF-REPORT OF ON-ROAD CRASHES AND TRAFFIC OFFENCES IN A COHORT OF YOUNG DRIVERS: THE DRIVE STUDY

doi:10.1136/jech.2011.142976m.28

¹S Boufous, * ¹R Ivers, ¹T Senserrick, ¹M Stevenson, ¹R Norton, ²A Williamson. ¹The George Institute for Global Health, University of Sydney, Sydney, New South Wales, Australia; ²Faculty of Science, University of New South Wales, Sydney, New South Wales, Australia

Introduction Road traffic injuries are a leading cause of death and disability worldwide, particularly among young adults. While surveys are widely used to measure the incidence of on-road crashes and offences, little is known about the validity of self-reports of these events, particularly among young drivers. This study examines the accuracy of self-report of on-road crashes and traffic offences among participants in the DRIVE study: a cohort study of 20 822 drivers aged 17–24 year-old, recently licensed in New South Wales, Australia.

Methods A total of 2991 DRIVE study participants who completed the follow-up questionnaire, approximately 2 years after joining the study, were asked whether they had been involved in an on-road crash or were convicted for a traffic offence during the year prior to the survey. This information was subsequently linked to police recorded crash and offence data to determine the level of accuracy of these self-reports.

Results Young drivers reported more crashes and traffic offences than those recorded in the police database during the 1-year study period. The findings showed a high level of accuracy in young drivers' self-report of police recorded crashes (85.1%; 95% CI 78.2% to 92.1%) and of police recorded traffic offences (83.0%; 95% CI 79.4% to 86.6%).

Conclusions The results suggest that surveys may be useful tools for estimating the incidence of traffic crashes and offences in young drivers. The findings are particularly relevant to countries and jurisdictions where access to administrative data are limited.

P2-502 PREVALENCE OF CHILD SEXUAL ABUSE AMONG WOMEN IN BRAZIL

doi:10.1136/jech.2011.142976m.29

G B de Castro, * I F Junior, L B Schraiber. Faculdade de Saúde Pública da Universidade de São Paulo, São Paulo, São Paulo, Southeastern, Brazil

Objective To estimate the prevalence of child sexual abuse among women in Brazil.

Methods Data based on a multicenter cross-sectional study performed by WHO. It used cluster sampling, with a representative sample of 1172 women aged 15–49 years in São Paulo, Southeastern Brazil, and 1473 women from Zona da Mata de Pernambuco, Northeastern. Standardised questionnaires were completed in 2000 and 2001. The χ^2 test was performed.

Results A total of 2645 women took part. 117 women reported childhood sexual abuse before age 15 years, a prevalence of 6.0% (95% CI 0.05% to 0.07%). The abuse occurred mainly between ages 12 and 15 years. The majority of violence abusers were aged 30–39 years and were male in 94.5% of the cases. Family members were responsible for the majority of abuse (43.6%, family friends 12.4%, strangers 10.2% and other persons 10.2%). A first occurrence of sexual occurrence age <15 years was reported by 203 women, of which 60.1% declared that it was forced ($p<0.001$). A higher percentage (64.7%) of women were abused once or twice, compared to few times (18.7%) and many times (16.6%). When the father was the perpetrator, the violence occurred many a few or many times.

Conclusions The prevalence of child sexual abuse among women is considerable in Brazil. The participation of family members and the severity of the violence is notable. Patterns of abuse by the father suggest recurrent and regular abuse. Further studies about factors associated with this issue are needed.

P2-503 FACTORS ASSOCIATED WITH CHILD SEXUAL ABUSE IN BRAZIL

doi:10.1136/jech.2011.142976m.30

G B de Castro,* I F Junior, L B Schraiber. *Faculdade de Saúde Pública da Universidade de São Paulo, São Paulo, São Paulo, Southeastern, Brazil*

Objective To analyse factors associated with child sexual abuse in Brazil.

Methods A cross-sectional study based on data of a multi-centre study performed by WHO. It used cluster sampling, with a representative sample of 1172 women aged 15–49 years in São Paulo, Southeastern Brazil, and 1473 women from Zona da Mata de Pernambuco, Northeastern Brazil. Standardised questionnaires were completed in 2000 and 2001. The follow variables (prior to the occurrence of sexual abuse) were analysed: sociodemographic characteristics (origin, migration) and family experiences of violence (mother abused by intimate partner, witness of violence in childhood). Non-conditional logistic regression was performed, with the estimative of ORs.

Results Physical violence by an intimate partner against the mother was associated with child sexual abuse in São Paulo (OR=2.37, 95% CI 1.35 to 4.17) and in Zona da Mata de Pernambuco (OR=2.42, 95% CI 1.38 to 4.23). Witnessing this violence was not associated with the outcome in both regions. Neither were sociodemographic characteristics.

Conclusions Girls exposed to violence against their mothers in their homes are in higher risk of suffering sexual abuse, regardless of some socio-demographic conditions. Studies on factors associated with abuse should be considered in the development of preventive policies and ensure children's rights.

P2-504 ABORTION AND SEXUAL VIOLENCE: THE VULNERABILITY'S CONTEXT AMONG YOUTH WOMEN

doi:10.1136/jech.2011.142976m.31

F B Pilecco,* D R Knauth, Á Vigo. *Universidade Federal do Rio Grande do Sul, Porto Alegre, Rio Grande do Sul, Brazil*

Introduction Illegality of abortion perpetuates socioeconomic inequities in what it is practiced and, like sexual coercion, obscures its consequences for the women's health.

Purpose To investigate the relationship between abortion and experiences of sexual coercion among young women.

Methodology Data analysed come from GRAVAD research, a cross-sectional study with stratified random sample, that was conducted with youth aged 18–24 years in Rio de Janeiro, Porto Alegre and Salvador. The present sample was composed by 870 interviews of women who reported having become pregnant. For statistical analysis was used Poisson regression with robust variance, incorporating structure of design and sample weights.

Results Abortion's statement was associated with account of one experience of sexual coercion (PR=1.60, 95% CI 1.04 to 2.44). It has also appeared associated with higher education (PR=2.78, 95% CI 1.77 to 4.36), greater number of sexual partners (PR=2.21, 95% CI 1.31 to 3.75), not obtained the first information about sex with parents (PR=1.90, 95% CI 1.14 to 3.18) and with a bigger number of pregnancies (PR=1.65, 95% CI 1.40 to 1.94) and sexual partners (PR 2.21; 95% CI 1.31 to 3.75). The prevalence of sexual coercion among young women in this study was 22.8%.

Conclusion Association between abortion and sexual coercion reflects a situation of gender's vulnerability. Sexual violence appeared together with other factors, such as abortion, denoting precarious negotiations in terms of sexuality and reproduction. The silencing of sexual coercion by public institutions contribute to increased vulnerability of young people, as it blocks the access to educational, legal and health features, that could help breaking situations of coercion and to prevent it recurrence.

P2-505 PREVALENCE AND RISK FACTORS ASSOCIATED WITH INFECTION BY LEISHMANIA INFANTUM IN DOGS FROM AN URBAN AREA OF BRAZIL IDENTIFIED BY MOLECULAR METHODS

doi:10.1136/jech.2011.142976m.32

¹W Coura-Vital, ^{1,2}M J Marques, ^{1,3}V M Veloso, ^{1,3}L E Reis, ^{1,3}S L Braga, ¹M H Morais, ^{1,3}A Reis, ¹M Carneiro.* ¹Universidade Federal de Minas Gerais, Belo Horizonte, Brazil; ²Universidade Federal de Alfenas, Alfenas, Brazil; ³Universidade Federal de Ouro Preto, Ouro Preto, Brazil

Introduction Over the last decades, visceral leishmaniasis (VL) has spread to a number of metropolitan areas in Brazil. The aim was to determine the prevalence and the risk factors associated with *Leishmania infantum* infection among seronegative and molecular positive dogs in an area of active transmission in Southeast of Brazil.

Methods A cross-sectional study was conducted with 1443 dogs, random selected. Molecular methods were performed using polymerase chain reaction (PCR-RFLP) and serology was conducted using ELISA. Mixed logistic regression model was used to evaluate the risk factors associated with *L. infantum* infection.

Principal findings Of the 1443 dogs examined, 230 (15.9%) were seropositive in ELISA assay, while PCR-RFLP revealed that 356 animals (24.7%) were positive and 1087 (75.3%) negative for *L. infantum* DNA. To identify the risk factors associated with infection, only seronegative animals (n=1213) were evaluated, and of these 296 (24.4%) were PCR-positive and 917 (75.6%) PCR-negative for *L. infantum* DNA. The risk factors associated with infection were family income < one minimum salary (OR.4.1; 95% CI 1.0 to 17.5), knowledge of the owner regarding the vector (OR.1.9; 95% CI 1.1 to 3.4), permanence of dog in the backyard (OR.2.3; 95% CI 1.2 to 4.4), and lack of examination for VL (OR.1.6; 95% CI.1.0 to 2.4).

Conclusions PCR is more accurate than serology in the early detection of infection among asymptomatic dogs, and its application on a large scale for the surveillance of VL could minimise false-negative results. Identification of the risk factors associated with canine visceral leishmaniasis is important for the definition of strategies of disease control.