

**SP6-53 ASSOCIATIONS BETWEEN BIRTH WEIGHT, GENDER AND TEETH ERUPTION IN INFANTS IN ARKHANGELSK, NORTHWEST RUSSIA**

doi:10.1136/jech.2011.142976q.24

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**Introduction** Birth weight is associated with many health-related conditions. However, associations with dental health remain largely unknown. Infants in Russia have on average eight erupted teeth by the age of 48 weeks. We studied associations between birth weight and eruption of deciduous teeth in Arkhangelsk, Northwest Russia. **Methods** Altogether, 456 randomly selected infants (51.3% were boys) at the age of 11–13 months (mean 47.8 weeks) underwent dental examination in a paediatric clinic in the city of Arkhangelsk. Data on birth weight were obtained from medical records. Mean numbers of erupted teeth by gender were compared using Mann–Whitney tests. Associations between having eight or more teeth and birth weight (in kilogrammes) were assessed by logistic regression with adjustment for gender, infant age and breastfeeding history.

**Results** The mean number of erupted teeth was 6.69 (95% CI 6.47 to 6.91). It was higher in boys than in girls (7.04 vs 6.32,  $p=0.001$ ). Altogether, 43.6% (49.8% of boys and 37.0% of girls) of all examined children had 8 or more teeth. A positive association between birth weight and having 8 or more teeth was observed: OR 1.79 (95% CI 1.19 to 2.70). Girls were less likely to have 8 or more teeth than boys: OR 0.65 (95% CI 0.43 to 0.98).

**Conclusions** The mean number of erupted teeth in infants in Arkhangelsk is lower than in Russia on average. Birth weight and male gender were positively associated with the odds of having 8 teeth by the age of 48 weeks. Potential mechanisms will be discussed.

**SP6-54 SUGGESTIVE BEHAVIOURS OF EATING DISORDERS IN UNDERGRADUATE FEMALE STUDENTS: PREVALENCE AND ASSOCIATED FACTORS**

doi:10.1136/jech.2011.142976q.25

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Eating disorders are behavioural syndromes which diagnoses criteria have been widely studied during the last decades. Anorexia nervosa, bulimia nervosa and partial syndromes stand out. Metabolic and electrolyte abnormalities and endocrine alterations can be present. Early diagnosis and an adequate management of these complications are important to reduce the risks associated. The objective of the study was to assess the prevalence of suggestive behaviours of eating disorders and associated factors, in undergraduate female students from a public university in the city of Rio de Janeiro. Cross-sectional study was conducted in 2004. The sample consisted of 512 students who answered a self-reported questionnaire based on the Eating Attitudes Test (EAT-26), Bulimic Investigatory Test of Edinburgh (BITE), used to investigate behaviours suggestive of disorders. It also included the General Health Questionnaire and questions about body image perception, leisure-time physical activity and nutritional evaluation. Ratios prevalences were estimated through Poisson regression. The mean age was 21.5 years old. Prevalences of 16.99% have been detected in the EAT-26, 25.00% in the BITE, and 33.40%

in the joint analysis of both instruments. There was significant association between behaviour suggestive of eating disorders and attending a course in the field of Education and Humanities (PR 1.41; 95% CI 1.06 to 1.89), age between 17 and 20 years (PR 1.78; 95% CI 1.01 to 3.14), and between 20 and 30 years old (PR 1.75; 95% CI 1.01 to 3.04), self-perception of being overweight (PR 1.84; 95% CI 1.39 to 2.42), and presence of common mental disorder (PR 1.42; 95% CI 1.01 to 1.83). These results showed that educational actions for control and prevention of eating behaviour suggestive of disorders among undergraduate female must be fostered.

**SP6-55 SEXUAL DEVELOPMENT AND LUNG FUNCTION IN ADOLESCENTS AGED 15 YEARS OLD: THE 1993 PELotas BIRTH COHORT**

doi:10.1136/jech.2011.142976q.26

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**Background** Lung function, measured by FEV<sub>1</sub> and FVC, increases with age and height and it has an accelerated increase during adolescence.

**Objective** To describe the relation between sexual development and lung function at the age of 15 in a birth cohort.

**Method** All children (N=5249) born in the city of Pelotas, Brazil, were enrolled in a prospective birth cohort. In 2008, all cohort members were sought for a follow-up visit (response rate =85.7%). Sexual development was obtained using Tanner stages in five categories (from 1 to 5). VEF1 and FVC were measured in litres by spirometry and used as continuous variables. A multiple linear regression model stratified by sex and adjusted for family income, mother's height and wheezing, adolescent's height, age, smoking, and skin colour was performed. For girls it was also adjusted by age of menarche.

**Results** In boys, sexual development was not associated with FEV<sub>1</sub> or FVC. On the other hand, among girls the regression coefficients for FEV<sub>1</sub> and Tanner stages 2, 3, 4 and 5 were, respectively:  $\beta=0.07$  (95% CI -0.04 to 0.18),  $\beta=0.13$  (95% CI 0.02 to 0.24),  $\beta=0.15$  (95% CI 0.04 to 0.26),  $\beta=0.14$  (95% CI 0.02 to 0.27). The regression coefficients for FVC and Tanner stages 2, 3, 4 and 5 were, respectively:  $\beta=0.11$  (95% CI -0.03 to 0.24);  $\beta=0.21$  (95% CI 0.08 to 0.33);  $\beta=0.25$  (95% CI 0.12 to 0.38) and  $\beta=0.23$  (95% CI 0.09 to 0.38).

**Conclusion** Sexual development is associated with lung function among girls but not boys, probably due to the earliest sexual development in girls.

**SP6-56 ARE MALES REALLY AT GREATER RISK FOR DOG BITES THAN FEMALES?**

doi:10.1136/jech.2011.142976q.27

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**Introduction** It is received wisdom that males are more likely to be bitten by a dog than females. While this is consistent with a greater perceived tendency towards risk-taking behaviour in males, previous studies investigating the gender-dog bite relationship have been limited either by a lack of or an improperly chosen comparison group.

**Methods** To investigate whether males are at higher risk for dog bites than females, we conducted a hospital-based case-control study in Kingston, Jamaica. Cases were all (120) dog bite victims (56 males, 64 females) seen in the outpatient department of St. Andrews Memorial Hospital in Kingston, from 1 January 2002 to 30 June 2003. Three control groups were selected from among outpatients

seen during the same time period: (a) 180 persons presenting for reasons other than dog bites (b) 121 persons presenting with non-dog bite injuries and (c) 126 persons presenting with non-injury conditions. Persons with conditions having known associations with gender were excluded from each control series.

**Results** ORs comparing males to females were (a) OR 0.8, 95% CI 0.5 to 1.3, (b) OR 0.6, 95% CI 0.4 to 1.0 and (c) OR 1.2, 95% CI 0.7 to 1.9).

**Conclusion** Our results do not support a hypothesis of a higher dog bite risk for males. We discuss them in the context of the type of injury under consideration, the different research questions implicit in each choice of control group and potential bias, especially as it relates to hospital-based case-control studies.

**SP6-57 INFLUENCE OF MATERNAL PERCEPTION ABOUT THE QUALITY OF ANTENATAL COUNSELLING ON THE CHOICE OF DELIVERY ATTENDANT AT WEST BANDUNG DISTRICT, 2010**

doi:10.1136/jech.2011.142976q.28

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**Introduction** This study investigated the influence of maternal perceptions about the quality of antenatal counselling on the choice of birth attendant.

**Methods** A case control study was conducted between June and August 2010 in West Bandung district, Indonesia. Cases are mothers who had antenatal visits to midwife but choose paraji—a traditional birth attendant—at delivery between February and July 2010 and lived in the study area. Controls are mothers who had antenatal visits to midwife and choose midwife at delivery between February and July 2010 and lived in the study area.

**Results** Samples were consisted of 122 cases and 156 controls. Multivariate analyses showed that mothers who had poor perception of antenatal counselling were 1.88 times more likely to choose Paraji as birth attendant (95% CI 1.10 to 3.23). This was after controlling for other variables including maternal age, maternal education, number of deliveries, number of antenatal, decision maker and health insurance. Mothers who visited midwives who often used foreign or medical terminology during counselling were 1.7 times (95% CI 1.01 to 3) more likely to use Paraji as birth attendant. Not using visual aids also led to a preference for Paraji birth attendants (OR 2.4, 95% CI 1.31 to 4.51).

**Conclusions** The study suggested that poor perception about antenatal counselling steered mothers to using traditional birth attendant rather than midwives and other types of birthing care. Recommendations included providing midwives' skills in interpersonal communication and counselling, and to provide multiple choices of visual aids to support the counselling process.

**SP6-58 DETERMINANTS OF VILLAGE HEALTH VOLUNTEER'S BEHAVIOUR ON RECORDING AND REPORTING DIARRHOEA CASES IN TEMANGGUNG DISTRICT, 2010**

doi:10.1136/jech.2011.142976q.29

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**Introduction** Diarrhoea is the second biggest disease in top ten diseases in primary healthcare in Temanggung. Monitoring diarrhoea is one of Village Health Volunteer's Integrated Service Pos duty. This research aimed to achieve determinants (age, education, occupation, duration of occupation, marriage's status, knowledge, attitude, facilities, training, outbreak, information) of Village Health Volunteer's behaviour for recording and reporting diarrhoea's cases.

**Methods** Design of this research is cross sectional. Population is Village Health Volunteer in Temanggung District. Sample size is 208 Village Health Volunteers. The data were collected by interviewing respondents with using questionnaire.

**Results** Most of Village Health Volunteers have bad behaviour in recording & reporting diarrhoea's cases (57.69%). The study results show that factors associated with village health volunteers are education background (OR 2.189, 95% CI 1.177 to 4.073), occupation (OR 2.474, 95% CI 1.356 to 4.514), training (OR 0.119, 95% CI 0.024 to 0.585), and knowledge (OR 1.895, 95% CI 1.043 to 3.442).

**Conclusions** Determinants of village health behaviour in recording and reporting diarrhoea cases are education, occupation, knowledge, and training. District Health office is recommended to hold a training with respect to education background. Education and occupation should be considered in village health volunteer's recruitment.

**SP6-59 FACTORS ASSOCIATED WITH DIARRHOEAL ILLNESS IN LEBAKWANGI HEALTH CENTER WORKING AREA, CIGUDEG SUB DISTRICT, BOGOR DISTRICT, INDONESIA IN 2009**

doi:10.1136/jech.2011.142976q.30

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**Introduction** In Bogor District, Indonesia diarrhoea is still a very serious public health problem frequently occurring in outbreaks. In 2009 there were eight outbreaks of diarrhoea, one in the working area of Lebakwangi Public Health Center, Cigudeg Sub District, affecting 258 patients with a case-fatality rate of 0.78%. The aim of this study was to examine the factors associated with diarrhoea in the working area of Lebakwangi Public Health Center.

**Methods** A case-control study was carried out. This study examined 130 cases who were patients with diarrhoea in Lebakwangi Public Health Center territory in August 2009 and 130 controls who were persons without diarrhoea from the same population. Data were collected by direct interviews using a structured questionnaire which included questions on sociodemographic, behavioural and environmental variables. Data were analysed using Stata.

**Results** In multi-variate analyses three factors were associated with experiencing diarrhoea: washing eating equipment without soap (OR 3.41 (95% CI 2.00 to 5.80)), family latrine availability (OR 2.66 (1.43 to 4.95)) and lack of availability of clean water sources (OR 1.83 (1.03 to 3.26)).

**Conclusions** Diarrhoeal illness was associated with washing eating equipment without soap, availability of family latrine and lack of availability of clean water source, with the strongest association between diarrhoeal illness and washing eating equipment with soap.

**SP6-60 HAND WASHING PRACTICE AMONG HEALTHCARE PROVIDERS IN A TERTIARY HOSPITAL IN SOUTH EAST NIGERIA**

doi:10.1136/jech.2011.142976q.31

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**Introduction** Hand washing been demonstrated to significantly reduce transmission of hospital-acquired infection. This study was carried to ascertain hand washing practice among care providers in a tertiary facility in Nigeria.