

alone, only once a day in 26% of the cases. Only 11% use dental floss, after 6 years in 37% of the cases. Eighty-two percent have already gone to a dentist, only 49% for prevention. Thirty-four percent of the parents say their children don't eat cariogenic foods. Seventy-three percent eat sweets frequently and 72% drink refrigerants. Only 44% of the parents said their children's oral hygiene is good and only 14% knew that caries is an infectious disease. The mean index of dental plaque before and after the teaching was 89% and 52%, respectively (reduction of 42%).

Conclusions: We observed a significant reduction in dental plaque with our taught and this let us conclude that this should be an issue to invest not only in the consultations, but also in schools and community settings.

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AGE AT CRYPTORCHIDISM DIAGNOSIS AND ORCHIOPEXY: A POPULATION-BASED STUDY OF 502,815 DANISH BOYS BORN FROM 1995 TO 2009

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Background and aims: Early treatment of cryptorchidism may be necessary to preserve fertility and international guidelines recommend that congenital cryptorchidism be treated with orchiopexy before one year of age. Acquired cryptorchidism should be treated at presentation. The adherence to guidelines during recent years is not known, and the aim of this study is to present data on age at cryptorchidism diagnosis and orchiopexy in recent Danish birth cohorts.

Methods: A population of 502,815 Danish boys born alive from January 1, 1995 to October 21, 2009 was identified using The Danish Civil Registration System. Five birth cohorts were defined, 1995-1997, 1998-

2000, 2001-2003, 2004-2006 and 2007-2009. The boys were followed in the Danish National Registry of Patients for a diagnosis of cryptorchidism and for an orchiopexy procedure. Data was analyzed using the Kaplan-Meier estimator and Cox regression models.

Results: During follow-up, 9,479 boys were diagnosed with cryptorchidism and 5,076 of these underwent orchiopexy. The mean age (years) at diagnosis among boys followed at least 5.8 years was: 1995-1997 cohort, 3.30 (95 % confidence interval: 3.23; 3.37); 1998-2000 cohort, 3.08 (3.01; 3.15); 2001-2003 cohort, 2.79 (2.73; 2.86). The corresponding mean age (years) at orchiopexy was: 1995-1997 cohort, 3.75 (3.65; 3.85); 1998-2000 cohort, 3.54 (3.45; 3.63); 2001-2003 cohort, 3.18 (3.10; 3.26). Restriction of the analyses to 427,650 term (gestational age \geq 37 weeks) singletons did not substantially change the results.

Conclusions: In the more recent birth cohorts of 1995 to 2006 we found a shift towards younger age at cryptorchidism diagnosis and orchiopexy.

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VIRTUAL PATIENTS: AN EFFECTIVE EDUCATIONAL INTERVENTION TO IMPROVE SENIOR HOUSE OFFICERS' EDUCATION AND TRAINING IN THE MANAGEMENT OF CHILD ABUSE?

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As a junior doctor is often the only doctor to assess children presenting with an injury or illness to the A&E department, it is crucial that they are skilled in the identification of possible child abuse or neglect.

Aim: To evaluate an interactive computer based Virtual Patient (VP) (using videos to simulate real life clinical scenarios) developed to teach paediatric Senior House Officers about the management of suspected child abuse.

Methods: The VP was used to facilitate a child abuse case discussion for Paediatric Basic Specialist Trainees in Ireland. A questionnaire was developed to determine SHOs' perception of the value of the

VP as an educational tool. Respondents were asked to rate their agreement with each statement on a 1 to 4 likert scale.

Results: All participants (N=25) completed the questionnaire. 100% of participants agreed or strongly agreed that the case was enjoyable, interactive and appropriate for their level of training and a valuable use of their time. Upon completion of the case, most participants reported greater self confidence in their ability to recognize (23/25) and report (24/25) cases of suspected child abuse. All participants felt that the VP helped raise their awareness of the difficulties surrounding the diagnosis and management of child abuse and enabled them to identify deficits in their knowledge.

Conclusion: There was an overwhelmingly positive response to the VP. The vast majority of participants reported improvements in their knowledge, confidence and attitude towards the management of child abuse.

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INDIRECT COSTS CAUSED BY ACUTE ROTAVIRUS GASTROENTERITIS IN SPAIN

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Background and aims: Impact of rotavirus in developed countries is mainly economic. The aim of this study was to assess the indirect costs induced by rotavirus acute gastroenteritis (RAGE) in Spain.

Methods: A prospective observational study was conducted from Oct-2008-to-Jun-2009 including 682 children up to 5 years-old with AGE attended in primary care (n=18), and emergency-room and hospital settings (n=10), covering the regions of Galicia and Asturias (North-West Spain). All non-medical expenses incurred were recorded in detail using personal interviews and telephone contacts.

Results: Of 682 enrolled children, 207(30.4%) were rotavirus positive and 152(22%) had received at least one dose of rotavirus vaccine. The mean (standard deviation) indirect cost caused by an

episode of AGE was estimated at 135.17(182.70) euros. Costs were 1.7-fold higher when acute gastroenteritis was caused by rotavirus as compared to other etiologies: 192.7(219.8)euros vs.111.6(163.5)euros ($p < .001$).The costs for absenteeism were the most substantial with an average of 91.41(134.76)euros per family, resulting from the loss of 2.45(3.17) days of work. In RAGE group the cost was 120.4(154)euros compared to 75.8(123) of the other etiologies($p = .002$), due to the loss of 3.5(3.6) vs1.9(2.9)days of work($p < .001$).Meals costs were 2-fold-higher in RAGE: 48.5(55) vs 24.3(46)euros[$p < .001$]. Travel costs were 2.6-fold-higher in RAGE:32(92)vs12.5(21.1) euros [$p = .005$]. There were no differences between groups regarding hiring of caregivers or purchase of material costs. Patients with RAGE were admitted to hospital more frequently (47.8%vs14%)[$p < .001$].

Conclusions: Rotavirus generates a significant indirect economic burden that should be considered in the economic evaluation of the eventual inclusion of rotavirus vaccine in the spanish immunization schedule.

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INHALED NITRIC OXIDE AFTER OXIDATIVE STRESS IN NEWBORN RATS. EFFECTS ON VEGF EXPRESSION AND ALVEOLARIZATION

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Background and aims: Exposure of newborn rats to hyperoxia decreases VEGF expression and impairs alveolarization. Much evidence indicates that NO plays a role in VEGF signaling and recent studies have shown that NO induces VEGF synthesis. The purpose of this study was to determine whether inhaled NO improves VEGF expression in the lung tissue and alveolarization after neonatal exposure to oxidative stress.

Methods: Newborn rats were randomized to breathe room air (A), 2 hours A + NO (20 ppm) , 2 hours hypoxia + 2 hours hyperoxia (HH), HH + NO, 2 hours hypoxia + air (HA) or HA + NO. We evaluated pulmonary VEGF in rats at 14 days of life by immunohistochemistry using 1:100 dilution of rabbit anti-human VEGF (sc-152, Santa Cruz). We used a semiquantitative assessment of VEGF