

International child health

G32 3 YEAR FOLLOW UP STUDY ON THE EFFECTIVENESS OF CLASSROOM BASED ANTISMOKING HEALTH EDUCATION PROGRAMME AMONG YOUNG CHILDREN IN MALAYSIA

A. M. H. Zabidi-Hussin, C. Y. F. Irfan, A. R. Mazidah, B. S. Quah. *Department of Paediatrics, School of Medical Sciences, 16150 Universiti Sains, Malaysia*

Introduction: The prevalence of smoking among children in Asia has increased dramatically over the past 10 years. At present, there are no specific antismoking education programmes for young children in Malaysia.

Aims: To study the outcome of a classroom based antismoking health education programme designed for young school children in Malaysia.

Methods: A validated questionnaire was used to assess knowledge, attitude, and practice (KAP) of smoking among school children based on WHO Self Questionnaire WHO/SMO/83.4. Specially designed anti-smoking health education modules were incorporated into the existing slots in the school curriculum and were administered by classroom teachers over a 6 week period. Pre and post (immediate, 6 months, and 2½ years) intervention KAP scores were compared between intervention and control schools.

Results: A total of 646 children consisting of 8 year old primary school and 13 year old secondary school children were studied in four centres throughout Malaysia. The prevalence of smoking was 9.4% in secondary schools and 6.2% in primary schools. The increase in mean KAP scores in intervention schools was significantly higher than control schools after intervention for both primary ($p \leq 0.001$) and secondary ($p \leq 0.001$) school children. In both groups, the mean KAP scores immediately and 6 months after intervention were significantly higher ($p \leq 0.001$) in intervention compared with control schools. At 30 months post intervention the mean KAP score among secondary school children in intervention schools remained significantly higher than control schools ($p = 0.006$) but not among primary school children ($p = 0.06$). However, repeated measure ANOVA analysis showed significant differences in the mean KAP score ($p \leq 0.001$) in both groups throughout the 3 year follow up period.

Conclusions: This purposely designed antismoking programme was proven effective in improving and sustaining positive KAP of young children in Malaysia and would be deemed suitable for a formal implementation.

G33 "CHILD FRIENDLY HEALTHCARE" IMPROVEMENTS IN KOSOVO, UGANDA, AND PAKISTAN

M. S. Nicholson, A. Clarke. *Hospitals in Kosovo, Uganda, Pakistan, and the UK*

Aim: To see if fear, anxiety, and suffering in children receiving healthcare, and their families, could be reduced by promoting child friendly healthcare (CFH), using the United Nations Convention on the Rights of the Child 1989 (UNCRC) as its mandate; and developing a method and process for assessing and improving CFH—a child health improvement programme.

Methodology (Qualitative action research): Review of the literature; initial collaborative audit of child health services in the participating hospitals; wide consultation to seek the views and opinions of senior representatives of international, national, and regional governmental and non-governmental organisations representing children using open interviews and health workers, children, and families using structured, semi-structured, and open interviews during two visits to participating hospitals (over 600 interviews); tick-lists of systems of care, supporting activities, resources and their organisation; evaluation and follow up to identify any beneficial changes in CFH and to find out if improvements sustainable and continuing.

Results: The structure and processes of the programme were found to be useful by all types of health worker and applicable to any type of healthcare. The programme facilitated sustained and continuing improvements in the delivery of CFH in each participating hospital that research evidence shows will reduce fear, anxiety, and suffering.

Conclusion: We have developed and piloted a simple low cost programme for assessing and improving CFH that works.

G34 THE RELATIVE CONTRIBUTIONS OF BODY MASS INDEX (BMI) AND WAIST TO HIP RATIO (WHR) ON SAMOAN ADOLESCENT MALE PERCEPTIONS OF FEMALE ATTRACTIVENESS

D. Knight¹, P. Davies², V. Swami³, M. Tovée⁴. ¹Royal Free and University College London Medical School; ²Sydney Children's Hospital, Randwick, Australia; ³Department of Psychology, University College London, UK; ⁴Department of Psychology, Newcastle University, UK

Aims: Over half of the population of Independent Samoa is overweight, with overnutrition being the main cause in children and adolescents. A shift in disease pattern is ensuing, with obesity related diseases replacing infectious diseases as the principal health issues. Traditionally the Polynesian veneration of large bodies confers positive societal values. Such cultural beliefs may influence the motivation for lifestyle modification. This motivation is analysed in terms of the effects of BMI and WHR on perceptions of female attractiveness.

Methods: 76 Samoan males aged between 15 to 17 from both urban and rural schools were asked to rate the attractiveness and healthiness of 50 standardised photographs of women with known BMIs and WHRs. There were ten women in each of the five BMI categories (emaciated, underweight, normal, overweight, and obese), with a range of WHRs (typically 0.68–0.90). Ratings were recorded on a nine point Likert scale.

Results: BMI is the primary determinant of female physical attractiveness in both urban and rural settings, accounting for 69.2% and 58.3% of variance, respectively. WHR failed to emerge as a significant predictor. A BMI of 21 corresponded to optimum perceived physical attractiveness and healthiness. There were no differences in preferences for physical attractiveness between the rural and urban groups, and no cross cultural differences were evident between the Samoan data and previous data from British participants.

Conclusions: The traditionally positive view of large bodies among Samoans is challenged by these findings in the adolescent population. However, disparity remains between perceived ideals and actual behaviour. Independent Samoa has the highest daily per capita energy intake in the Western Pacific, and so may benefit from dietary education. The desire displayed by the Samoan adolescent population for BMIs that correlate with health suggests that health promotion would be embraced rather than impeded by traditional cultural values.

G35 SEVERE IODINE DEFICIENCY IN SOUTHERN ALBANIA

J. M. Bridson¹, M. Bozo², L. Grimci³, V. Selima³, M. S. Tanner⁴, M. B. Zimmermann⁵. ¹Child Advocacy International, Newcastle under Lyme; ²The Ministry of Health, Tirana; ³Department of Pediatrics, University Hospital, Tirana; ⁴Academic Unit of Child Health, University of Sheffield; ⁵Lab for Human Nutrition, Swiss Federal Institute of Technology, Zürich

Background and Objective: There are no recent data on the severity of the iodine deficiency disorders (IDD) in Albania. The aim of the present study was to assess current IDD status in southern Albania.

Design and Methods: In primary school children in urban and rural areas in southern Albania, urinary iodine concentration (UI) and iodine concentration in salt at retail and household levels was measured. Goiter was graded by palpation and thyroid volume determined by ultrasound.

Results: Children aged 5–14 years ($n = 826$) were sampled at two urban and five rural primary schools. In the two urban schools, the median UI was 45 µg/L, the goiter prevalence was 32%, and salt iodine levels were inadequate (< 15 µg/g) in 78% of household salt samples. In the rural schools, the median UI was 17 µg/L, the goiter prevalence was 95%, and no household salt samples were adequately iodized. Among children in the rural schools, 73% had grade 2 goiter and 20% had nodular changes detected by thyroid ultrasound.

Conclusions: In southern Albania, school children in rural villages are severely iodine deficient. Distribution of oral iodized oil capsules is indicated to control IDD in vulnerable groups until salt iodization is implemented.

G36 HEALTH AND SOCIAL NEEDS OF CHILDREN OF ASYLUM SEEKERS: A 1 YEAR LIVERPOOL EXPERIENCE

A. Noglik, Z. Bassi, S. Snelling. *Royal Liverpool Children's NHS Trust, Liverpool*

Introduction: The past decade has seen an increase in families seeking asylum in the UK. They come from different cultures and have varied social/medical problems. Our aim is to highlight the needs of the children of these families in a single urban centre.

Method: A case note review was performed of the children who were referred to the community paediatrician with medical, social, or child

protection concerns in central Liverpool between 6/02 to 5/03. Twenty three children were identified using the hospital database and the register of attendance.

Results: Fourteen children (9 males; median age 6 years; mean stay in UK 20 months; mean stay in Liverpool 10 months) were referred to the community paediatric clinic with health concerns. The families originated from eastern Europe or Africa and 11 required a translator. The health problems included cerebral palsy (4), autism (3), behavioural difficulties (2), spina bifida with hydrocephalus, epilepsy, developmental delay, Down's syndrome with complications, and growth failure. These medical problems had been previously undiagnosed in 6 children (mean age 8 years; diagnosis: cerebral palsy (2), autism (3), and Down's syndrome). Most (11) needed further investigations and assessment and two were referred to mental health services. Three children had severe learning difficulties yet none had a school placement. The decision on the residence status is pending in nine families while permanent residence has been granted to two families and three have been deported. Within a separate group, we saw nine children (three males, median age 4 years; eight east European origin/1 Somali) referred with child protection concerns, of which two required hospital admission for further assessment. Two children were moved to a safe place and one child was placed on the child protection register.

Conclusion: The medical/social needs of these children are complex and varied. Support for these children needs to be multifaceted and this has resource implications in health planning for local authorities in areas housing asylum seeking population.

G37 NEURODEVELOPMENTAL OUTCOME AT 8 YEARS OF LOW BIRTHWEIGHT TERM INFANTS

A. M. Emond, P. I. C. Lira, M. C. Lima, S. McGregor, A. Ashworth. *Centro de Ciências da Saúde, Universidade Federal do Pernambuco, Recife, Brazil*

Aim: To investigate the development and behaviour of a group of low birthweight (LBW) infants born at term in northeast Brazil, and compare

their outcomes with a control group of term infants who were of appropriate birth weight (ABW).

Method: A cohort of LBW term infants (BW 1500–2500 g) and their matched ABW term controls (BW 3000–3500 g) were enrolled in 1991–2 from maternity units in a poor rural area in the south of Pernambuco in North East Brazil. At the age of 8 years, the surviving children were traced and assessed at a research clinic using a battery of clinical and psychological tests. The quality of the child's environment was measured using a modified HOME inventory.

Results: A total of 164 children were seen for assessment at 8 years of age: 83 (32 male, 51 female) LBW, and 81 (29 male, 52 female) ABW, representing 40% of the original birth cohort of 414 newborns enrolled in 1993–4, and 51% of the 325 infants previously traced for follow up by 12 months of age. Compared with ABW controls, the LBW group had significantly lower IQ scores on the WISC111 (mean (SD) of 75.2 (13.2) cf 79.4 (14.1) $p < 0.05$), the differences between the two groups being larger in the performance scale (5 points) than the verbal scale (3 points). Although the LBW group performed worse on memory tests, the differences did not reach significance. The LBW group had more problems with selective attention using the sky search subscale of the TEACH: 31/82 (38%) of the LBW group had scores > 1 SD below the mean compared with 18/81 (22%) of the ABW group ($\chi^2 3.99$, $p 0.046$). Using a short version of the ABC, the LBW group had significantly poorer eye-hand co-ordination ($p 0.01$) but the differences in static balance and manual dexterity did not reach significance. A Portuguese version of the Strengths and Difficulties Questionnaire (SDQ) was completed by the child's parent and teacher, and although hyperactivity and conduct problems were common in both groups, the total problems score of the LBW children did not differ from the ABW controls.

Conclusion: Children born with LBW have continuing difficulties at 8 years in cognition, attention, and co-ordination, independent of environmental factors.