and brown—OR: 1.1 to 0.9; 1.5). These estimates were not significantly altered in models including variables related to life-course SEP. Conclusion In this Brazilian population, UL risk increased with the darkening of skin colour, and the life-course SEP did not mediate this association.

### P1-418 PREVALENCE OF DENTAL PAIN AND ASSOCIATED FACTORS AT 5 YEARS OLD: FINDINGS FROM A BRAZILIAN BIRTH COHORT

doi:10.1136/jech.2011.142976g.8

<sup>1</sup>F Demarco,\* <sup>1</sup>G Boeira, <sup>1</sup>M Correa, <sup>2</sup>K Peres, <sup>2</sup>M Peres, <sup>1</sup>I Santos, <sup>1</sup>A Matijasevich, <sup>1</sup>A Barros. <sup>1</sup>Federal University of Pelotas, Pelotas, Rio Grande do Sul, Brazil; <sup>2</sup>Federal University of Santa Catarina, Florianopolis, Santa Catarina, Brazil

Introduction Despite dental pain being an important public health issue, very few studies have investigated its occurrence in preschool children using a life course approach. The objective of this study was to describe the prevalence of dental pain in preschool children and its association with life course characteristics.

**Methods** This study was nested in a population-based birth cohort from Pelotas, Brazil, started in 2004. A sample of 1129 children aged 5 years old underwent dental examination and their mothers were interviewed. Exploratory variables included sociodemographic factors, maternal oral health status and associated behaviours, and children's primary dental caries. Data were analysed using multivariable Poisson regression.

**Results** Toothache was present in 16.5% of the population in the 6 months prior to interview. Adjusted analyses showed that darkskinned children [Prevalence ratio (PR)=1.6 (95% CI 1.1 to 2.4)], from low economic level [PR 1.9 (1.2 to 3.0)], whose mothers had <4 years of study [PR 1.9 (1.0 to 3.6)], and whose mothers with <10 teeth in one arch at least [PR 1.66 (1.09 to 2.53)], and those with high caries prevalence at age  $5\,\mathrm{years}$  [PR 4.8 (3.3 to 7.1)] were associated with dental pain.

Conclusions Low family income and lack of children's schooling are the main early life risk factors for dental pain in preschool children. Poor maternal and child dental status are associated with dental pain. The socioeconomic and family context in which dental pain occurs should be taken into account when dental pain preventive measures are implemented.

## **HEALTH PROMOTING SCHOOL INITIATIVE IN ASHRAM** SCHOOLS OF WARDHA DISTRICT: AN EVALUATION

doi:10.1136/jech.2011.142976g.9

<sup>1</sup>A Dongre,\* <sup>2</sup>P Deshmukh, <sup>2</sup>B Garg. <sup>1</sup>Department of Community Medicine, Sri Manakula Vinayagar Medical College, Pondicherry, India; <sup>2</sup>Dr Sushila Nayar School of Public Health, Mahatma Gandhi Institute of Medical Sciences, Sewagram, India

**Objective** To study the effect of health promoting school-based intervention for disadvantaged children in the residential Ashram Schools of rural Wardha district of central India.

Material and Methods At baseline, 1287 children in 10 Ashram schools were examined using locally adopted Global School-based Student Health Survey questionnaire. Ashram (residential) schools are residential schools providing lodging and boarding, uniforms, books and notebooks and educational equipments to its poor inmates. It covered information on personal hygiene, physical status, nutrition, environment, substance abuse, risk behaviour, life skills and others. Haemoglobin examination of all children was done by using Haemoglobin colour scale. Body Mass Index (BMI) and Physical activity score for each child was calculated. Intervention was carried out through trained school health committee members. After 1 year, 1226 children were examined as end line assessment by using the same questionnaire. The data were entered and analysed using Epi info software.

Results Overall, there was significant improvement in the status personal hygiene and reduction in related morbidities among school children. Noteworthy, percentage of current tobacco consuming children declined significantly from 506 (39.3%) to 210 (17.1%). The mean haemoglobin of the children increased from 10.7 g/dl to 11.4 g/ dl. Notably, there was significant decline in thin (below 5 th percentile) children from 67.5% to 60.8% and there is increase in normal children with BMI for age (5<sup>th</sup>-85<sup>th</sup> percentile) from 32.2% to 38.5%. Conclusions The need based participatory Health Promoting School initiative for vulnerable Ashram school children could improve their health status.

## P1-420 | FIBRE INTAKE AND EVOLUTION OF BODY MASS INDEX: FROM PREPREGNANCY TO POSTPARTUM

doi:10.1136/jech.2011.142976g.10

M Drehmer,\* S Camey, M A Nunes, B Duncan, M Lacerda, M I Schmidt. *Universidade* Federal do Rio Grande do Sul, Programa de Pós-Graduação em Epidemiologia, Porto Alegre, Rio Grande do Sul, Brazil

Background Postpartum weight retention is important risk factor for obesity in reproductive age women. The role of fibre intake still needs clarification, being among those dietetic factors that may be associated with a positive evolution of postpartum weight variation. **Objectives** To evaluate the effect of fibre intake on the evolution of maternal body mass index (BMI) from pregnancy to postpartum, and to identify dietary patterns associated with fibre intake.

Methods A cohort of 370 pregnant women was followed until the sixth month of postpartum. Food intake was obtained using foodfrequency questionnaire. Focused principal component analysis was used centered on postpartum weight retention and on total dietary fibre intake. Obesity risk was a variable defined to indicate unfavourable evolution of BMI in postpartum. Poisson regression was used to estimate the association between fibre intake and obesity risk.

Results Participants retained a median of 4.4 kg (IR 0.6; 7.9), and obesity risk was present in 55.1% (n=189) of the sample. Individual food items did not have an important effect on weight retention. The highest contribution of fibre intake came from the consumption of beans. Consumption of bread and rice indicated a common Brazilian food pattern along with beans. In the multivariable model, inadequate fibre intake increased 24% (95% CI 1.05 to 1.47) the obesity risk, after adjusting for maternal age, prepregnancy BMI and total gestational weight gain.

Conclusion Maternal BMI showed an increasing trend from prepregnancy to postpartum. Adequate fibre intake may reduce obesity risk in the period following childbirth.

# P1-421

## **DETERMINANTS OF SATISFACTION WITH HEALTHCARE: A** POPULATION-BASED STUDY FROM IRAN

doi:10.1136/jech.2011.142976g.11

F Farzadi, A Montazeri,\* J Sadighi, S Omidvari, F Maftoon, A Aeenparast, K Jahangiri, M Vahdaninia. Iranian Institute for Health Sciences Research, ACECR, Tehran, Iran

**Introduction** Satisfaction with healthcare is an important indicator of effective healthcare delivery. It could contribute to both policy

Methods This was a nationwide cross sectional study. A random sample of individuals aged between 18 and 65 were entered into study. Respondents were asked to rate their overall satisfaction with healthcare on a 5-point scale. The record of demographic and socioeconomic data included age, gender, education, marital status, employment, income, and chronic diseases. Logistic regression