nervous trouble (OR 4.7 (4.1 to 5.4), OR 4.1 (3.4 to 4.8), respectively); odds of neglect were increased for those in institutional care (OR 3.8 (2.7 to 5.4)) or with a family member in prison (OR 3.8 (3.0 to 4.8)).

Conclusion Forms of maltreatment co-occurred in the cohort, such that cumulative exposure to neglect increased odds of abuse. Maltreated children had elevated exposure to household dysfunction.

P19 SOCIOECONOMIC DISPARITIES IN TRAJECTORIES OF ADIPOSITY ACROSS CHILDHOOD

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1,2L D Howe, 1K Tilling, 1B Galeball, 1,2G Davey Smith, 4A R Ness, 1,2D A Lawlor.
1Department of Social Medicine, University of Bristol, Bristol, UK; 2MRC Centre for Causal Analyses in Translational Epidemiology, University of Bristol, Bristol, UK; 3Department of Oral and Dental Science, University of Bristol, Bristol, UK

Objective Socioeconomic inequalities in obesity are consistently observed in high-income countries, with lower socioeconomic groups tending to be more adipose amongst both adults and children. The development of such inequalities across childhood, however, has not been studied using longitudinal data.

Design Using longitudinal data from a prospective birth cohort study, we modelled individual trajectories of adiposity from birth to 10 years using random effects linear spline models, and estimated differences in trajectories by socioeconomic position (measured by maternal education). Trajectories were modelled separately for boys and girls.

Setting Avon Longitudinal Study of Parents and Children, South West England.

Participants Participants were born in 1991/1992.

Main Outcome Measure Ponderal index (PI, kg/m², N=12 246) from birth to 2 years and body mass index (BMI, kg/m², N=11 580) from 2 to 10 years. Height and weight measures were from research clinics, health records, and parent-completed questionnaires; trajectory models included an indicator of measurement source to account for reduced accuracy of parent-reported measurements.

Results There was little socioeconomic patterning of PI from birth to 2 years. Socioeconomic differences in BMI began to emerge by 4 years old, and widened with increasing age. Amongst girls there was a clear gradient across all categories of maternal education by age 8, with daughters of more educated women being less adipose. Amongst boys, sons of degree educated women had lower BMI, but there was little difference between the three lower maternal education categories. By 10 years old the mean BMI difference between the highest and lowest education category was 0.38 kg/m² for boys and 0.89 kg/m² for girls. The results imply that interventions to prevent inequalities in childhood obesity should begin in preschool years.

P20 DESCRIPTION OF DIETARY INTAKES OF ACRYLAMIDE IN THE BORN IN BRADFORD BIRTH COHORT STUDY

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1,2J Hepworth, 1L K Fraser, 1E Petherick, 2V J Builey, 1J Cade, 4F te Kok, 4S van Breda, 8S A Kyritsopoulou, 1M Botaival, 1J Kleinjans, 1P A McKinney, 1Paediatric Epidemiology Group, Division of Epidemiology, University of Leeds, Leeds, UK; 2Bradford Institute for Health Research, Bradford Royal Infirmary, Bradford, UK; 3Nutritional Epidemiology Group, Division of Epidemiology, University of Leeds, Leeds, UK; 4Department of Health Risk Analysis and Toxicology, University of Maastricht, Maastricht, The Netherlands; 5National Hellenic Research Foundation, Athens, Greece

Background Compounds created during the cooking and processing of food may be associated with to future child health if consumed during pregnancy. One such compound is acrylamide, which has been suggested as a potential dietary carcinogen, and is formed during the cooking of starchy foods. Little information is available on intake during pregnancy.

Objective To estimate intakes of the dietary compound acrylamide during pregnancy and describe the association of intakes with maternal age in years (<20, 20–39, 40+), ethnicity and quintile of deprivation when classified using the index of multiple deprivation (IMD07).

Design Data were collected using a Food Frequency Questionnaire (FFQ) within the Born in Bradford multi-ethnic birth cohort study carried out in the city of Bradford, UK. The FFQ was given to all women recruited into Born in Bradford between September 2007 and July 2009 and completed at between 28–32 weeks of pregnancy. Participants were asked to self-complete information on the frequency of intakes for selected food items. Values for acrylamide intake were derived using estimated European exposure values taken from the literature within different food groupings. Values of acrylamide consumption were grouped into quintiles. Multivariate logistic regression was then used to investigate maternal characteristics associated with the highest quintile of acrylamide consumption.

Results 5294 women were recruited between September 2007 and July 2009 and 4212 (79.5%) completed the FFQ. Overall estimated mean intake of acrylamide was 35.5 µg/day (SD: 27.2), French fries (31.1%), toast (18.3%) and crisps (12.2%) made the largest contributions to overall intake levels. Maternal characteristics associated with the highest quintile of acrylamide intake (>52.4 µg/day) was an age less than 20 years old (OR: 2.0, 95% CI 1.6 to 2.5), those aged 40 and over were less likely to be in this quintile (OR: 0.3, 95% CI 0.1 to 0.7). There was a significant interaction between ethnicity and deprivation levels (p<0.01) with pregnant women of white ethnicity showing an increasing trend of being in the highest quintile of intake with increasing deprivation score whereas for women of south Asian ethnicity there was no significant relationship between deprivation and acrylamide intake.

Conclusion Intakes of the dietary contaminant acrylamide during pregnancy were found to vary according to maternal age, ethnicity and deprivation levels. This may have implications for the targeting of public health messages if there are future findings which lead to recommendations for reductions in intake.
having pain interference (extremely, quite a bit, moderately) and having no pain interference (a little bit, not at all).

**Life-Course SEP Measures** (1) Age left school (young adulthood SEP): those who left school at ≤ the minimum school leaving age assigned low SEP; those who left school at > the minimum school leaving age assigned high SEP. (2) Longest job (adult working life SEP) and (3) Current/recent job (most recent adult SEP): using the National Statistics Socio-economic Classification, Routine and manual occupations were assigned low SEP; Intermediate and managerial and professional occupations were assigned high SEP. Life-course SEP trajectories were constructed for each respondent from the three measures.

**Other Measures** BMI, HADS, health locus of control, adequacy of income.

**Analysis** Confined to participants who provided data at three SEP time-points (n=2555). Association of pain interference with each SEP trajectory (High, High, High (HHH) as reference trajectory) was calculated by logistic regression and adjusted for age, gender and BMI. Forward stepwise logistic regression was used to adjust for potential confounding psychosocial and social factors. Latent class analysis identified any clustering in SEP trajectories.

**Results** Adjusted response to the three stages of the survey was 71–85%. The LLL SEP trajectory was significantly associated with pain interference compared to HHH (OR 2.73; 95% CI 2.16 to 3.45); this association was not altered by age or gender. Adjustment for the remaining factors reduced the association but it remained significant (OR 2.05; 95% CI 1.56 to 2.70). Latent class analysis identified two clusters of SEP trajectories: those that started Low remained Low, those starting High remained High.

**Conclusion** In this study, adults with a consistently low SEP throughout their life-course were more likely to report pain interference in later life.

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**Children/Adolescence**

**P23** PATTERNS OF ANTIRETROVIRAL THERAPY IN A EUROPEAN STUDY OF HIV-INFECTED CHILDREN AND ADOLESCENTS

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N M Alam, M Cortina-Borja, C Thorne. UCL Institute of Child Health, London, UK

**Background** Antiretroviral therapy (ART) has resulted in increasing median survival times in HIV-infected individuals by sustaining viral load suppression. Since children and adolescents are likely to have long-term exposure to ART, it is important to understand patterns of drug use to investigate the emergence of unintended sequelae.

**Aim** To investigate patterns of ART in children and adolescents.

**Study Design** Cross-sectional analysis of HIV-infected subjects aged 2–22 years across 15 clinical sites in Belgium, Italy and Poland.

**Method** Prevalence of both “ever-use” and “current-use” (at recruitment) of ART drug classes: nucleoside analogue reverse transcriptase inhibitors (NRTIs); non-nucleoside analogue reverse transcriptase inhibitors (NNRTIs); and protease inhibitors (PIs), and individual drugs were investigated.

**Results** Among 468 participants (51% female) the median age was 13.5 years (IQR 9.9–17.0) with 50% (at recruitment) of white ethnicity and 104 (22%) Black African. Overall, 291 (62%) were virologically suppressed (HIV-RNA ≤50 copies/ml) at enrolment and 55 (7%) had severe immuno-suppression (age-stratified CD4%). Only 23 (5%) subjects were ART-naïve (median age=10.0 years, IQR=6.1–14.3). 15 had experienced moderate or severe immuno-suppression/HIV-disease, with 15 having detectable viral load at recruitment. Of the ever-treated subjects, 98% (n=436) had received zidovudine or lamivudine in the past and 72% (n=524) currently; 82% (n=368) and 72% (n=325) had been ever-exposed to PIs and NNRTIs, respectively. Median and modal lifetime number of drugs was six. Over their lifetime, 119 (27%) subjects had been exposed to ≥8 drugs (median age=15.7 years, IQR=12.3–18.0). Age was associated with duration of total drug use (p=0.001), with median age of ART initiation of 3.6 years (IQR=1.1–7.4). Median total duration of drug use was 8.7 years (IQR=5.7–11.2 years). Nine percent of currently treated subjects (n=38) had suboptimal management, defined as NRTIs-only (24 showing evidence of incomplete viral suppression), and 91% (n=384) had treatment with combination ART (cART).

The most common PI in current-use was kaletra (n=170, 40%).