Methods
56 sequentially recruited infants <32 weeks and <1.5 kg birth weight within week 1 of life. Stool samples taken once weekly for the first 4 weeks, analysed by gas chromatography-mass spectrometry (mg/g wet weight). 11 individual acids were measured: acetate, lactate, isobutyrate, butyrate, isocaproate, caproate, isovalerate, valerate, octanoate, heptanoate and lactate. NEC was diagnosed by consultant, external collaborator and radiologist, using Bell’s Criteria.

Results
32 children (18 boys, 14 girls) were identified who required PN for intestinal failure for combined total of over 12,500 PN days. 9 children had no positive blood cultures. There were 126 positive blood cultures (27 organisms isolated) in the remaining 23 children. Of the 21 children who used a heparin-saline based catheter lock, 86% had one or more CRBSI. 11 children used a taurolidine-based catheter lock, with only 45% having one or more CRBSI.

Conclusion
There was a significant reduction in the incidence of CRBSIs in those children using taurolidine-based catheter locks (TauroLock™) compared to heparin locks. There was an absolute risk reduction of 40.3% (95% CI 7.25 – 73.3%) with a numbers needed to treat (NNT) of 3 (95% CI 1.4–13.8). The use of taurolidine locks on all children on long-term home PN could reduce morbidity and mortality, and have a significant impact on the associated costs of CRBSIs. Taurolidine-based catheter locks should be considered for all children on long-term PN.

REFERENCE

Young Persons Special Interest Group/Child Public Health Interest Group

IS THERE A LINK BETWEEN ADHD AND SOCIAL DEPRIVATION?

Aim
Attention Deficit Hyperactivity Disorder (ADHD) is a neurodevelopmental disorder that affects approximately 4–6% of school-aged children. Research into the aetiology of ADHD has focussed on genetic and biological factors, with much less information on environmental and social aspects. There is a general perception that adverse experiences in childhood are associated with the development of ADHD. One such adverse experience is social deprivation, which has been studied in a variety of population-based studies.

Background
Social deprivation is associated with a range of negative outcomes, including an increased risk of developing ADHD. The aim of this study was to investigate the relationship between social deprivation and ADHD in a cohort of young people.

Methods
A large, population-based cohort of children was identified, and data on social deprivation and ADHD status were collected. Multiple regression analysis was used to assess the association between social deprivation and ADHD, adjusting for potential confounders.

Results
The study found a significant association between social deprivation and ADHD, with an increased risk of ADHD among children living in areas of higher social deprivation. The association was independent of other potential confounders, including family income and educational attainment.

Conclusion
These findings support the hypothesis that social deprivation is a risk factor for the development of ADHD. Further research is needed to investigate the mechanisms by which social deprivation may increase the risk of ADHD, and to explore potential interventions to reduce this risk.

Abstract G206(P) Table 1

<table>
<thead>
<tr>
<th>Group 1 (January 2009–2010) anti-tTG &lt;12U/ml</th>
<th>anti-tTG (U/ml)</th>
<th>N = 19</th>
<th>History positive</th>
<th>History negative</th>
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<td>18–60</td>
<td>4</td>
<td>2</td>
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</tr>
<tr>
<td>60–100</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td></td>
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<td>&gt;120</td>
<td>10</td>
<td>8</td>
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<table>
<thead>
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<th>Group 2 (January 2010–2012) anti-tTG &lt;100U/ml</th>
<th>anti-tTG (U/ml)</th>
<th>N = 13</th>
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<td>7–10</td>
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</tr>
<tr>
<td>10–50</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>50–100</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

Abstract G207

IS THERE A LINK BETWEEN ADHD AND SOCIAL DEPRIVATION?

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Aim
Attention Deficit Hyperactivity Disorder (ADHD) is a neurodevelopmental disorder that affects approximately 4–6% of school-aged children. Research into the aetiology of ADHD has focussed on genetic and biological factors, with much less information on environment and social aspects. There is a general perception that
ADHD is linked to deprivation, but there are not enough studies in literature to prove or disprove this assumption. The aim of this study was to investigate the relationship between social deprivation and ADHD.

**Methods**

We included all patients diagnosed with ADHD by the community paediatric department (only those on medications). Postcodes of these patients were used to produce deprivation scores, which included overall deprivation and sub-scores for income, social and housing factors. Indices of Deprivation 2010 are available for 32,482 small geographical areas (Lower Super Output Areas, LSIOAs) in England, ranked from 1 (most deprived) to 32,482 (least deprived). These are further divided into fifths to produce English deprivation quintiles. Each postcode was then allocated to a quintile based on their deprivation score, where quintile 1 represents the most deprived.

**Results**

A total of 144 patients diagnosed with ADHD were being treated with medication. The male to female ratio was 4.5:1 (M: F). The deprivation scores were calculated and it showed that 64 patients (44.4%) were in the most deprived quintile (quintile 1), and followed in a relatively linear pattern. A similar pattern was seen for income, crime, employment, education, skills and training domain and health deprivation and disability, where 69, 57, 74, 69 and 59 patients were placed in quintile 1, respectively.

**Conclusion**

Our study shows an association between the prevalence of ADHD in children and deprivation index. Also there is clear link between sub scores for income, crime, employment, education, skills and training domain and health deprivation and disability and prevalence of ADHD. Indices of deprivation could be used to predict the expected prevalence of ADHD within the community and thus plan allocation of resources. Ours is a small sample size, but results support further investigation with a larger study.

### G208 DISTINCT HEALTHCARE PRIORITIES IN EARLY ADOLESCENCE

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Alcohol and Drug use in Young People is a current national topic of great curiosity which occasionally, junior doctors manage with less interest during busy A&E shifts and pressing admission beds. A taboo subject infrequently discussed in the Paediatric/Adolescent patient history, health professional competence in assessing risk may also be variable, but could be improved by a strong presence of multi-departmental teaching, publicity of accessible in-tranet management guidance and on-site service information-specific patient and parent leaflets.

A retrospective analysis of attendance data for 9–17 year-olds to a busy District General Hospital Accident and Emergency Department during a peak festive and school holiday season was conducted. Young persons presenting with potential substance misuse risk factors were identified from diagnosis codes and filtered for specific substance misuse concerns. Highly suspected cases were then audited for management and discharge outcome at point of departure from the department.

A total of 334 young persons between the age of 9–17 years presented to our A&E Department between December 2011-January 2012. Forty (12%) had diagnosis coding for alcohol intoxication, alcohol withdrawal, deliberate drug overdose, head injury, alleged assault, faint, road traffic accident injuries undetermined, psychiatric problem, hyperventilation, collapse and injury to face. Of these, 9 (22.5%) were young persons between 15–17 years-old and identified as high risk for substance misuse. Only 1 case was referred to the Adult medical team, and was admitted, but none of the remaining patients were referred to a Paediatric team and were discharged home or had absconded. Only 1 patient had a documented use of a “Substance Misuse Assessment Tool”, and none had Psychiatric or CAMHS input nor were referred to a Young Person-specific Substance Misuse service.

Health professionals who regularly manage young people in A&E, including A&E nursing staff need essential training in assessing Young People for Substance Misuse. Young Person-specific Substance Misuse clinical guidelines would be useful to increase case management confidence for Paediatricians, junior A&E doctors and Adult Physicians. A valuable resource to the NHS, referral to Young Person-specific services in Substance Misuse should be considered in these guidelines. Multi-departmental, multi-disciplinary agreement is imperative for successful implementation.