CHANGING PATTERNS OF EMERGENCY PAEDIATRIC ADHD MONITORING: AUDIT OF NICE GUIDELINES

Background
ADHD is a complex, diverse and common neuro-developmental disorder, associated with many comorbidities. NICE guidelines set out the monitoring requirements for children being treated for ADHD. Wigan has more than 1000 children being treated for ADHD. Wigan has more than 1000 children on its database with ADHD on medication, mostly on stimulant medication. Monitoring of the effectiveness of stimulant medication. Monitoring of the effectiveness of

Methods
Retrospective review of all attendances (02/03/20–03/05/20) compared to 2019. Outcome measures included demographics, number of attendances, source of referral, presenting complaint, discharge diagnosis and disposal. Descriptive statistics, with subgroup analysis by age/sex/ethnicity and pandemic time-periods (pre-lockdown, lockdown weeks 1–3 and lockdown weeks 4–6) were performed.

Results
4417 attendances (57% illness; 43% injuries) occurred between 02/03/20–03/05/20, compared to 8813 (57% illness; 43% injuries), a reduction of 50%, maximal in lockdown week 2 (-73%).

Association of Paediatric Emergency Medicine

598 CHANGING PATTERNS OF EMERGENCY PAEDIATRIC PRESENTATIONS DURING THE FIRST WAVE OF COVID-19: LEARNING FOR THE SECOND WAVE FROM A UK TERTIARY EMERGENCY DEPARTMENT

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Background
The SARS-CoV2 pandemic and initial public health response led to significant changes in health service delivery, access and utilisation. The SARS-CoV2 illness burden in children and young people (CYP) is significantly lower than in adults. To inform effective child public health interventions we aimed to compare patterns of paediatric emergency department presentations.

Objectives
Describe the ED attendance pattern of CYP during COVID-19 compared to the same period in 2019.

Methods
Retrospective review of all attendances (0–18yrs) over the initial pandemic (02/03/20–03/05/20) compared to 2019. Outcome measures included demographics, number of attendances, source of referral, presenting complaint, discharge diagnosis and disposal. Descriptive statistics, with subgroup analysis by age/sex/ethnicity and pandemic time-periods (pre-lockdown, lockdown weeks 1–3 and lockdown weeks 4–6) were performed.

Results
4417 attendances (57% illness; 43% injuries) occurred between 02/03/20–03/05/20, compared to 8813 (57% illness; 43% injuries), a reduction of 50%, maximal in lockdown week 2 (-73%).

Presenting complaints
2529 (57%) attendances were illnesses and 1868 (43%) injuries, compared to 5005 (57%) and 3764 (43%) respectively in 2019. The top five illness complaints were breathing difficulty, fever, abdominal pain, diarrhoea & vomiting and rash, unchanged from 2019. Ranking of top 3 illness presentations changed across the pandemic weeks. Breathing difficulty dropped from 1st (300;25%) to 2nd (117;21%) to 3rd (59;11%); (p<0.001). Abdominal pain rose from 3rd pre-lockdown (87;7%) and lockdown weeks 1–3 (37;7%) to 2nd in weeks 4–6 (62;12%; p=0.004). Fever ranked 2nd (235;19%) pre-lockdown, 1st (134;24%) in week 1–3 and week 4–6 (94;18%; p=0.035).

Friage category
88 (2%) attendances were triaged as a category 1 (CAT1) and 544 (12%) as a category 2 (CAT2); this is compared to 146 (2%) and 1134 (13%) in 2019. There was no variation in CAT1 across pre-lockdown (2%), lockdown weeks 1–3 (2%) and lockdown weeks 4–6 (2%) and minimal variation in CAT2 (12%, 13% and 11% respectively across pandemic weeks), indicating no change in severity of presentations.

Source of referral (SOR)
3065/4417 attendances (69%) were by self-referral, proportionally the same as in 2019 (6149/8813; 70%). Emergency services/urgent care were the second most common SOR for 487 (11%) attendances, similar to 2019 (762/8813; 9%). NHS111 referral ranked third (416/4417; 8%) and GP ranked 4th (315/4417; 7%). This was different to 2019, where GP referral ranked 3rd (755/8813; 9%) and NHS111 ranked 4th (734/8813; 8%).

Disposal
708 (16%) attendances resulted in admission, 3647 (83%) were discharged, 61 (1%) did not wait (DNW) and 1 patient died during the pandemic period. This was compared to 1675 (19%) admissions, 6755 (77%) discharges, 383 (4%) who DNW and no deaths in 2019.

Conclusions
Despite a 50% reduction in attendances there was no significant change in proportions of illness/injury, acuity of illness, source of referral or disposal. Rank of illness presentations changed, with abdominal pain ranking second, and fever first, an important change which should prompt further research into causes. Clear public health messaging for CYP and collaborative guidance for primary care is required in this second wave to ensure CYP have access to appropriate emergency, routine and mental health services.

British Association for Community Child Health

601 ADHD MONITORING: AUDIT OF NICE GUIDELINES

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Background
ADHD is a complex, diverse and common neuro-developmental disorder, associated with many comorbidities. NICE guidelines set out the monitoring requirements for children being treated for ADHD. Wigan has more than 1000 children on its database with ADHD on medication, mostly on stimulant medication. Monitoring of the effectiveness of...
medication and adverse effects is crucial. Adverse effects on growth, heart rate, blood pressure changes and worsening behaviour may significantly impact the child if left unmonitored.

**Objectives** To review children who are on ADHD medication and to ensure parameters are monitored as per the NICE & Regional GM guidelines in order to improve our patient care.

**Methods** 47 patients who attended clinic in November 2018 and completed a symptom rating scale at this clinic visit were reviewed. The notes for these patients were reviewed for every clinic visit for these patients in the period January 2018 – July 2019.

**Results** In total we reviewed 118 clinic visits in 47 patients. 28% were age under 10 and 72% over 10. Of these 30% of under 10 were seen the minimum of 3 times a year, whereas for the over tens 44% were seen the minimum of twice a year.

Core ADHD symptoms were recorded in 30%. The effectiveness of the medication was discussed in 56% and the side effects in 9%. The ongoing need for medication was only discussed once.

Height and weight were well documented in 97% of cases, yet only 11% recorded the growth centile. 21/118 (18%) clinic visits showed a loss in weight compared with previous visit, 33% of those had a plan to address the problem.

Cardiovascular side effects monitoring was poor, with heart rate measured in 65% and blood pressure in 78%. Heart rate was found to be greater than 120 in one case but no action was taken. Blood pressure was only plotted on the centile chart in 1 case.

Symptoms like tics were discussed in 7%, seizures 0% and Sleep 59%. Worsening behaviour was discussed in 70% cases.

**Conclusions** NICE guidelines recommend that children age under 10 should be reviewed at least 3 times per year and over 10 should be seen twice a year. In our audit only 30% of under 10s were seen three times. Monitoring of patients on medication for ADHD was not good. Height and weight should be checked in all children but this is poorly plotted on the correct growth chart. Blood pressure and heart rate are not always being checked.

The audit highlighted gaps in monitoring of our ADHD patients. Following this audit, a side effect questionnaire was introduced for use at all clinic visits. Rating scale questionnaires were also introduced to assess the effectiveness of the medication. Also we appointed a clinical pharmacist, who completed his prescribing course. Our ADHD specialist nurse also completed the prescribing course to help the paediatricians review medication as per NICE recommendation.