an average age of 15 years. ADHD and Autism were diagnosed in 5% and 2.4% respectively.

Conclusions The audit confirms the high prevalence of physical, emotional and neurodevelopmental disorders among the LAC. It highlights need for providing a comprehensive assessment and holistic management with regular follow-up for this group of vulnerable CYP. This should involve close collaboration between a wide range of multidisciplinary professions from the Educational, social care, health, mental health and voluntary sectors.

We recommend that national guidance should consider replacing the mental health screening by Strength and Difficulties Questionnaire with wider-spectrum screening tools designed to explore a wider range of emotional, behavioural and neurodevelopmental disorders among LACYP, such 12-item ESSENCE-Q and 181-item Five to Fifteen-R (FTF-R) questionnaire.

British Association of Perinatal Medicine and Neonatal Society

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AN AUDIT INTO THE MANAGEMENT OF EXCESSIVE WEIGHT LOSS IN THE NEONATAL PERIOD AND THE IMPACT OF THE COVID-19 PANDEMIC

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Background It is accepted that healthy neonates can lose weight in the first days of life due a negative fluid balance caused by diuresis of extra fluid and breast feeding only supplying small amounts of colostrum. In breastfed neonates there is an average weight loss of 6.6% from their birth weight in the first days of life. Weight loss of greater than 10% can be associated with underlying pathology such as Neonatal Hypernatremic Dehydration (NHD). Weighing of neonates on day five and ten of life as recommended by NICE, has been shown to lead to earlier identifications of feeding difficulties, NHD and abnormal weight loss.

Objectives To review local management of neonates presenting with significant weight loss in the first 3 weeks of life.

To compare the management of neonates presenting with significant weight loss in the first 3 weeks of life prior to and during the Covid-19 pandemic.

Methods Cases were identified from admissions coded as 'Feeding Problems' during two separate six month periods, prior to and during the Covid-19 pandemic. From these, cases meeting the inclusion criteria were identified manually. The circumstances of the admission and the management of the neonate was assessed and described using descriptive statistics. A comparison between the cases and their management prior to and during the Covid-19 pandemic was performed using paired T-Testing.

Results n=16 cases met the inclusion criteria. n=12 of these cases were admitted in the six months prior to the Covid-19 pandemic. n=4 cases were admitted during the Covid-19 pandemic.

The neonates admitted with weight loss had a mean gestation of 39 +0 weeks and a mean birthweight of 3480g. 56% were born by Caesarean Section. The mean maternal age was 34 years. n=10 of the neonates were born to primiparous

mothers. The mean weight loss was 13.9%. These factors were not statistically different in the pre-pandemic and pandemic groups.

n=15 neonates were breast fed on admission. Of these n=2 were discharged fully formula fed, n=10 were breastfed (with or without expressed breast milk top ups) and n=3 were mixed feeding. There was no difference in the discharge feeding plans between the pandemic and pre-pandemic group.

The length of hospital stay was significantly less in the neonates admitted during the pandemic (mean= 0.75 days) compared to prior to the pandemic (2.5 days) p=0.041.

Conclusions Infants that were admitted with weight loss in this audit were more likely to be born to primiparous mothers, breastfed and born via caesarean section.

Fewer neonates presented during the Covid-19 pandemic compared to before the pandemic. The length of stay in hospital was shorter during the Covid-19 pandemic.

Despite local and national guidelines to encourage ongoing breast feeding and supplementation with expressed milk, neonates presenting with weight loss are often discharged either exclusively formula fed or mixed feeding.

British Association of General Paediatrics

1238

NOT BEING IN DKA ON ADMISSION AND NORMALISING BLOOD GLUCOSE VALUES FROM ONSET KEY TO EXCELLENT HBA1C VALUES ONE YEAR AFTER DIAGNOSIS OF TYPE 1 DIABETES

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Background NICE guidance recommends paediatric patients with Type 1 Diabetes Mellitus (T1DM) should achieve a HbA1c target level of 48mmol/mol (6.5%) or lower.

Objectives We therefore wanted to investigate potential factors that led to an optimal HbA1c one year after diagnosis in paediatric patients.

Methods We did a case review of paediatric patients newly diagnosed with T1DM from 01/01/17 to 31/12/20 who are managed by the paediatric diabetes team at Doncaster Royal Infirmary. Factors we looked at included initial presentation (DKA or no DKA), gender, index of multiple deprivation, family structure and average glucose control at week 1, week 2 and one month. We compared these factors with HbA1c at 1 one year to establish any patterns associated with better control, as dictated by HbA1c <48 mmol/mol (6.5%).

Results 9 newly diagnosed T1DM patient were identified. 37.5% (18 patients) presented with diabetic ketoacidosis (DKA) at diagnosis. 88.9% of children who presented with DKA at diagnosis had a HbA1c >48mmol/mol one year after diagnosis. There was a positive correlation between lower average blood glucose values one week, two weeks and one month after diagnosis with lower HbA1c values at one year. On Sub-analysis of patients with HbA1c <48mmol/mol and HbA1c >70mmol/mol, the mean blood glucose at one week, two week and one month were much lower in the <48mmol/mol group compared to the >70mmol/mol group.

No associations with age at diagnosis, index of multiple deprivation decile, and two parent households were found.

Conclusions Evidence from this case review shows that identifying diabetes early (thereby preventing development of DKA)

and achieving target bloods glucose values from the outset of diagnosis can lead to an optimal HbA1C (48mmol.mol or lower) one year after diagnosis. More awareness needs to be created among primary care and paediatric teams in recognising symptoms of diabetes and the importance of normalising blood glucose values early.

International Child Health Group

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RANDOMIZED CONTROLLED TRIAL ON THE EFFECT OF WEEKLY IRON/FOLIC ACID SUPPLEMENTATION ON ANEMIA AND SCHOOL PERFORMANCE AMONG SCHOOL CHILDREN IN RURAL SUDAN

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Background Anemia is a major health problem affecting one-quarter of the world's population. Anemia is particularly severe in developing countries, where poverty and other socioeconomic and health factors exacerbate it. Children are among the population groups that are more affected by iron deficiency anemia comprising around 60% of anemia cases globally. One of the most devastating complications of anemia is its impact on children's school performance. Anemia, which is often caused by socioeconomic disparities, can produce more socioeconomic inequity by reducing children's school performance and negatively impacting their educational attainment and future economic potentials.

On the treatment side, supplementation of iron plus folic acid is recommended by some health authorities, including the WHO, as a measure to counter the effect of iron deficiency anemia on pre-school and school-age children.

Sudan is one of the low-income African countries where the prevalence of childhood iron deficiency anemia is widespread. Despite that, very little research is done to study the consequences of this serious public health problem and explore effective approaches to address this alarming risk. Our study was the first to examine the effect of iron/folic acid supplementation on anemia, hemoglobin, and school performance among Sudanese primary school students.

Objectives To evaluate the prevalence of anemia, its risk factors and the effect of iron/folic acid supplementation versus folic acid alone on anemia and school performance among school children in Northern Sudanese village in 2020

Methods This study was an interventional – community based double-blind RCT with concurrent parallel study design, involving 220 healthy school children in a small village, Northern Sudan. Out of the 220 children study group, 5 were excluded from the study because of absence or not meeting the study criteria. The trial was conducted from January 2020- April 2020. Of the study group, 109 pupils were given iron plus folic acid intermittently, and 106 were given folic acid only. Levels of hemoglobin and school performance were then measured in the two groups. We used a mixed-model logistic regression analysis to test for an intervention effect on hemoglobin levels and school performance change in the experimental group compared to the control group.

Results Intermittent iron with folic acid supplementation significantly reduced the probability of anemia by 65.7% ($P = 0.00216$) in the experimental group, compared to the control group, which was given folic acid only.

The effect of iron/folic supplementation on school performance was not statistically significant, probably due to the complex nature of academic achievement.

Conclusions Intermittent supplementation of iron plus folic acid is effective in treating iron deficiency anemia among school-age children. School performance is known to be affected by anemia in childhood, but evaluating the impact of iron supplementation on this consequence of anemia needs a more extended cohort study.

British Association of Perinatal Medicine and Neonatal Society

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TRANSFUSION-ASSOCIATED NECROTISING ENTEROCOLITIS (TANEC) CASES REPORTED TO THE UK HAEMOVIGILANCE ORGANISATION 2011–2019

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Background Necrotising enterocolitis (NEC) is a serious neonatal gastrointestinal condition associated with significant morbidity and mortality. It affects 5–7% of preterm low birth weight (500g-1500g) infants. It is postulated that trigger events and environmental factors initiate intestinal injury in a vulnerable infant, prompting a hyper-inflammatory response.

NEC occurring within 48 hours of a red cell transfusion has been described as 'transfusion-associated NEC' (TANEC). From numerous observational/case-control studies it is estimated to occur after approximately 25–35% of transfusions, generally in older infants born more preterm than others with NEC; multiple pathogenic mechanisms have been proposed. It has been difficult to establish causation or true association; these are not supported by indirect evidence from meta-analysis of randomised controlled trials of liberal vs restrictive transfusions.

Objectives To analyse cases of TANEC reported to the UK haemovigilance scheme between 2011 and 2019.

Methods The UK Serious Hazards of Transfusion (SHOT) haemovigilance scheme collects and analyses anonymised reports of adverse events and reactions following blood transfusion. SHOT has encouraged reporting of TANEC since 2011. The paediatric reports are all separately analysed by the SHOT paediatric working expert sub-group.

Results Between 2011–2019, 19 cases of TANEC were reported to SHOT. All who had gestational age recorded (13/19) were preterm, with a median gestation of 26+6 weeks (range 23+3 to 33). Age at presentation with TANEC was less than 28 days for 5 cases (youngest 10 days), 1 month for 13, and 2 months for a single case. For all cases where a time of onset of symptoms following transfusion was stated (16/19) this was within 24 hours of transfusion with a mean of 3 hours.