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.