immune populations. To reduce spread of drug resistance and better identify other causes of febrile illness in children, anti-malarial medicines should only be given to patients with confirmed malaria. Parasitological diagnosis of malaria is now accessible for different healthcare settings including primary care.

Objectives To assess the impact of parental education level on treatment seeking behaviour towards suspected childhood malaria in an endemic area.

Methods Over 2 days, we randomly distributed questionnaires (see table 1) to parents of children under 12 years old, in the nursery-primary school of a rural village in South-East Nigeria, and evaluated the results. The rural village and school were all chosen at random.

Results There were 94 respondents out of 138 parents. None or Primary education 39 (41.5%), Secondary education 33 (35.1%), and Post-secondary education 22 (23.4%).

Respondents with post-secondary education are more likely to suspect malaria and/or visit a primary care centre/hospital

Abstract 684 Table 1 (Questionnaire)

Gender:	Man	Woman	Non-Binary
Age:	15–20 yrs	21–25 yrs	>25 yrs
Highest educational level:	none or primary education	secondary education	post-secondary education
How do you check temperature for fever:	thermometer	hand-feeling	
Behaviour on 1st day of fever:			
(1) Do you suspect malaria on 1st day of fever	Yes	No	
(2) Action taken on 1st day of fever:			
	<ul style="list-style-type: none"> • Paracetamol/ibuprofen only then watch and wait • Herbal medicine • Patent medicine dealer • Primary care centre/Hospital visit 		

Abstract 684 Table 2 Impact of parental education level on behaviour on 1st day of fever

	Suspected Malaria on 1st day of Fever	Paracetamol/ibuprofen only then watch and wait	Herbal medicine	Patent medicine dealer	Primary care centre/Hospital visit
None or Primary education	28.21%	0	69.23%	30.77%	0
Secondary education	51.51%	24.24%	45.45%	24.24%	6.06%
Post-secondary school education	86%	22.73%	13.64%	9.09%	54.55%

on the 1st day of fever. Respondents who did not attain a post-secondary education are more likely to give their children herbal medicine on the 1st day of fever (see table 2).

Conclusions This study suggests that parental education level has an impact on treatment-seeking behaviours for suspected childhood malaria, as parents with post-secondary education are more likely to facilitate early diagnosis and treatment by 'suspecting malaria and/or healthcare facility visit on 1st day of fever'.

There could be confounding factors such as parental age/experience which weren't explored in this study. Improving parental education could be one of the solutions to keep parents informed and empowered during their children's illnesses.

Paediatricians with Expertise in Cardiology Special Interest Group

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CHEST PAIN IN THE PAEDIATRIC EMERGENCY DEPARTMENT

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Background Chest pain is common among children presenting to the Emergency Department, and is infrequently caused by cardiac pathology.

Objectives This quality improvement project aims to investigate the aetiology of chest pain in children presenting to the Emergency Department and to examine the use of investigations in these patients.

Methods Retrospective data was collected on all children attending the Emergency Department at a District General Hospital in London (The Royal Free Hospital), between June 2019 – June 2020, with a triage complaint of chest pain. Patients were categorized according to the final diagnosis at discharge. Data was collected and analysed in August 2020. Patients with a traumatic cause of their chest pain were excluded. One hundred and sixteen patients were included in this study.

Results In pre-pubescent boys (age less than 12) the causes of chest pain include musculoskeletal (26%), gastrointestinal (26%), respiratory (21%), psychiatric (11%), idiopathic (11%) and one patient had cardiac pathology (prolonged QT interval). Twelve patients had an ECG (63%), one of which was abnormal (long QT interval). Four patients had a chest x-ray (21%), one of which was abnormal (pneumonia). No patients had cardiac enzymes measured.

In post-pubescent boys the causes of chest pain include musculoskeletal (49%), idiopathic (33%), respiratory (9%), psychiatric (5%), gastrointestinal (2%) and one patient had cardiac pathology (myocarditis). Forty patients had an ECG (93%), four of which were abnormal (ST elevation; two patients had right bundle branch block; first degree heart block). Eighteen patients had a chest-xray (42%), none of which were abnormal. Five patients had cardiac enzymes measures (12%), which were elevated in one patient (myocarditis).

In pre-pubescent girls (age less than 11) the causes of chest pain include musculoskeletal (41%), respiratory (23%), gastrointestinal (9%) and one patient had cardiac pathology (supraventricular tachycardia). Nineteen patients had an ECG (86%),

one of which was abnormal (Wolff Parkinson white). Four patients had a chest x-ray (18%), one of which was abnormal (pneumonia). No patients had cardiac enzymes measured.

In post-pubescent girls the causes of chest pain include musculoskeletal (69%), idiopathic (16%), respiratory (9%), gastrointestinal (3%) psychiatric (3%) and one patient had cardiac pathology (prolonged QT interval). Twenty-nine patients had an ECG (91%), one of which was abnormal (prolonged QT interval). Nine patients had a chest x-ray (28%), none of which were abnormal. No patients had cardiac enzymes measured.

Conclusions The most common cause of chest pain was musculoskeletal (49%). 2% of cases were due to cardiac pathology. The ECG was a common screening tool for children presenting with chest pain. The number of chest x-rays performed in post-pubescent boys was notably higher than in the remaining groups. Cardiac enzymes were rarely performed.

British Association for Paediatric Nephrology

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CHILDREN UNDERGOING KIDNEY TRANSPLANTS DURING THE PANDEMIC AND THEIR FAMILIES FEEL SIGNIFICANT FEAR

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Background The current SARS-CoV-2 pandemic has brought a lot of anxieties for patients with end stage renal disease particularly as they were identified as a vulnerable group. Many transplant programmes were closed and reopening brought new concerns for patients and professionals. We report patient experience on receiving a kidney transplant in childhood in our centre during the pandemic.

Objectives This study aims to get a better understanding of the concerns patients and families have about receiving a kidney transplant during the SARS-CoV-2 pandemic which would help professionals in their transplant programmes.

The secondary outcome was to identify if these concerns were adequately addressed prior to transplant and if patients and carers felt safe care was delivered throughout their transplant experience.

Methods In the first six months of the reopening of our transplant programme, 13 paediatric patients received a kidney transplant. An anonymous online questionnaire was sent to all patients and families who received a renal transplant. The questionnaire contained multiple choice and open-ended questions that explored how participants felt in respect to SARS-CoV-2, what concerns they had and how they found the additional safety precautions that our unit implemented during the pandemic.

Results Study participants included 50% parents or carers responding on behalf of a child under 12 years of age, and the remaining were children over the age of 12 years. All transplanted patients felt that all their questions were answered before the transplant and 75% felt well informed about SARS-CoV-2 and the effects it may have on transplantation. 62.5% reported feeling nervous, 37.5% were anxious, 25% scared and 12.5% felt relaxed about transplantation during the pandemic. The majority of participants reported

surgical complications being their biggest fear; and two participants were worried about catching SARS-CoV-2. Other concerns that participants mentioned were regarding the recovery time and having to spend time away from loved ones. More than 87% felt that care was delivered safely in inpatient and outpatient settings, although one participant mentioned feeling vulnerable when leaving the hospital. 75% of participants found shielding easy and understood its importance before the transplant and this increased to 87.5% after the transplant. Overall, 87.5% of patients were glad to have received a kidney transplant during the pandemic with one patient reporting how difficult they found it being isolated from friends and family once they felt well after the transplant.

Conclusions Receiving a kidney transplant can be a stressful experience, particularly during a pandemic. Our results show the SARS-CoV-2 pandemic has had a significant impact on children and families with end stage renal disease with patients reporting feeling significant fear. We found that detailed counselling of patients and families about risks and addressing their concerns related to SARS-CoV-2 contributed to a good patient and family experience on transplantation during the pandemic. Further studies are needed to look into the long-term effects of the pandemic on this vulnerable group of patients and strategies in addressing the same to improve patient experience.

Quality Improvement and Patient Safety

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USING SERVO CONTROL AS A PART OF NORMOTHERMIA BUNDLE IN A TERTIARY NEONATAL UNIT

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Background Hypothermia has high correlation with neonatal mortality and maintenance of normothermia is a key quality indicator of neonatal care. Recent National Neonatal Audit Programme (NNAP) data has shown that only 67.9% of pre-term neonates (<32 weeks gestational age) born in Lancashire Women's and Newborn Centre were normothermic (36.5–37.5) on admission to the neonatal unit. Comparing this to the national average of 70.3% highlighted the importance of a need for practice change.

Objectives The introduction of a normothermia bundle was proposed as a QI initiative to optimise thermoregulation, the use of SERVO control in the delivery room being a part of this. This was based on the principle of closed loop feedback to regulate heater output instead of manual control. The idea was to prevent both hypo and hyperthermia.

Methods A process map of thermoregulation was produced in the form of a flow-diagram with specific emphasis to human factors and role allocation of a temperature champion. This was disseminated to all relevant health care professionals via teaching, simulation and daily briefs. After an initial pilot of 1 month, certain alterations were made and a final SOP was agreed upon.

Results Data collected over a 3 month period after implementation has shown 100% of delivery room temperatures in <32 weeks gestational age within range prior to transfer, and 81.2% with normothermic admission temperatures.