Covid 19 although is primarily respiratory virus, its effects on other organ systems are getting attention as we are learning new symptomatology. With the increasing evidence, it is evident that SARS Cov-19 related encephalopathy is not that uncommon, especially if patients is suffering from other comorbidities and is older than 50 years of age. Garg et al in his paper mention about cytokine storm secondary to intense inflammatory response generated by Covid 19 Virus may contribute to encephalopathy.

Our case highlights the similar finding in paediatric age group which is interesting. Unfortunately, we could not perform lumbar puncture but to complete the evaluation it is advisable to evaluate serum and CSF paired cytokines to consider possibility of Immune effector cell neurotoxicity syndrome.

Results Our case is first reported case of Covid 19 encephalopathy in Rett syndrome.

Conclusions Our case sets an alert to consider encephalopathy as a presenting features in Covid 19 patients with underlying neurological condition.

Quality Improvement and Patient Safety

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NEONATAL THERMOREGULATION DURING LONG LINE INSERTION

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Background Preterm infants often require line insertion and are known to be at high risk of temperature instability during these procedures. Both hypothermia and hyperthermia adversely affect patient condition and can impact long term morbidity and mortality.

Having recognised temperature at line insertion as a clinical concern anecdotally and through the mortality review process a quality improvement project was designed to review process and identify areas for change.

In 2018, an audit highlighted poor neonatal thermoregulation during line insertions and a new guideline 'Thermoregulation for central line insertion' was created. This guideline was to bring to awareness the harmful effects of temperature changes in preterm infants and also the management options to correct the temperature and avoid hypothermia or hyperthermia.

Objectives To evaluate the thermoregulation interventions made when the neonate's temperature is found to be out of range. The current practice at this hospital is the use of a Drager temperature display monitor which is situated behind the incubator.

The new temperature probe, which has been introduced in this project, displays the temperature on the overhead monitor alongside monitoring such as heart rate and oxygen saturations. When set, the overhead monitor can alarm when the patient's temperature is measured to be out of range, not only alerting the staff undertaking the procedure but other members in the room as well.

Methods Most recently, over six weeks we evaluated the documentation of long line insertion procedures to compare with the current standard of 100% which is a completed long line proforma. We also compared the continuous documentation of temperature and interventions when using the Drager temperature display with the overhead monitor temperature display.

Results The overall documentation of the long line proforma was inadequate and particularly poor documentation of temperature during the procedure. It was found that 26% of the long line proforma were completed against the expected standard of a complete proforma which is 100%.

When assessing the current practice, temperature and intervention were often not recorded or recorded inadequately. Using the new probe, long line documentation of temperature had improved, and more interventions documented. 87% of long line forms had the continuous temperature recording documented for the new probes used in comparison to the 43% using the current Drager temperature display.

Conclusions The new probe has been shown to be effective in increasing awareness of temperature changes during long line insertions as documentation of temperature and intervention had improved. The persistent alarm brings more attention and urgency to the harmful temperatures, thereby leading to the staff taking action.

We recommend the new probe be stocked, included with line insertion equipment, the central line checklist modified and an assistant is available to assist with documentation.

We also recommend that there should be a re-audit of the new temperature probes and documentation of temperature in 6–12 months. The re-audit should not be limited to long lines only, but any line insertion, also procedures such as intubations. The new temperature probe would be useful for any procedure that increases the risk of temperature instability in the neonate.

Association of Paediatric Emergency Medicine

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WINTER 2020–21 IN THE PAEDS ED – A PUBLIC HEALTH REVOLUTION?

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Background The Paediatric Emergency Department is typically under immense pressure during winter months but the winter of 2020–2021 has seemed very different. We sought to quantify this and to reflect on how local departments, regional healthcare systems and national guidance could adapt as a result.

Objectives

1. To determine whether or not there was any significant difference in the overall number of patients attending our Paediatric Emergency Department in winter months during the COVID–19 pandemic compared to preceding years.

2. To determine whether or not there was any significant difference in the spectrum of patients attending our Paediatric Emergency Department in winter months during the COVID-19 pandemic compared to preceding years.
3. To reflect on how these findings should influence local, regional and national public health strategy moving forward.

Methods We reviewed all attendances for patients under 18 years of age at our Paediatric Emergency Department for the months November, December, January and February and years 2018–2021 inclusive.

We compared overall attendances for each year.

We also compared proportions of patients attending with respiratory presentations, mental health, safeguarding, minor injuries or 'other', using diagnostic coding.

Results

1. Paediatric ED attendances for December 2020, January 2021 and February 2021 were significantly lower than during preceding years.
2. The proportion of patients attending the Paediatric ED with respiratory complaints were significantly lower in the 2020–2021 Winter compared with the preceding two years.
3. The proportion of patients attending the Paediatric ED with mental health or safeguarding complaints were significantly higher in the 2020–2021 Winter compared with the preceding two years.

Conclusions At a local level, these changes have required rapid redeployment of staff and services to areas of greater need and, in particular, have driven improvement to better rapid Child & Adolescent Mental Health Services (CAMHS) input.

The significant reduction in respiratory illness should lead to careful consideration of some level of social distancing/infection control measures to remain in place in future years, with balanced consideration of the resulting impact on safeguarding and mental health.

Paediatric Clinical Leaders: Service Planning, Provision and Best Practice

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UNDERPAYMENT OF LESS THAN FULL TIME TRAINEES IN SOUTH LONDON DGHS DUE TO WEEKEND ALLOWANCE MISCALCULATION

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Background With the introduction of the new Junior Doctor Contract (Terms and Conditions of Service for NHS Doctors and Dentists in Training (England) 2016), the way junior doctors are paid has changed dramatically. Pay is now made up of multiple elements, each with a unique and specific way of being calculated. These include a Basic Salary, Additional Rostered Hours, Weekend Allowance, Night Premium, Flexible Pay Premium and Less Than Full Time (LTFT) Allowance. For trainees who work LTFT each of these elements is calculated differently, adding a new layer of complexity.

Within the medical profession, this has led to widespread uncertainty about how pay should be calculated. While resources are available to explain it, most LTFT junior doctors are

unfamiliar with how they should be paid. This means they cannot check the accuracy of their own salary, relying on correct calculation and pay by hospital payroll departments. Anecdotally, it was recently noted that there were errors in the Weekend Allowance pay for a number of LTFT trainees in a South London DGH and therefore this study aims to categorise them further.

Objectives A retrospective study was conducted to identify the accuracy of Weekend Allowance supplements for trainees working LTFT in South London. The long-term objective is that identification of payroll errors will allow payroll departments to correct internal pay algorithms, ensuring accurate pay and increased satisfaction levels amongst LTFT trainees.

Methods LTFT trainees working in South London were asked to volunteer their personalised work schedules and pay slips for their current training post. Their expected Weekend Allowance was calculated manually, based on their personalised work schedule. This was then compared to the value stated on their work schedule and their actual take home Weekend Allowance pay. A copy of each trainees personalised work schedule was analysed to identify where (if present) the miscalculation error was made. At the same time, a survey was done to answer whether the trainee was aware of how their Weekend Allowance should be calculated.

Results Trainees from 5 DGHs in South London responded. Weekend Allowance pay was incorrect in 3 of the 5 hospitals. The nature of the error was different in each case and all errors led to trainee underpayment. Of the 11 trainees identified to have been affected, the mean underpayment was equivalent to £1600 gross per annum. The most significantly affected trainee was underpaid by £3531 gross per annum. Of all those surveyed, not a single trainee was aware of how their Weekend Allowance should be calculated or that an error had been made.

Conclusions The 2016 Junior Doctor Contract has led to increased complexity in salary, especially for those working LTFT. This survey has identified a clear need for personal responsibility in understanding how trainees are paid, along with improved education for payroll departments to ensure errors are not made. To date, around £3800 among five trainees has been recouped, with more pending. One hospital's payroll department has formally recognised the error and is taking steps to correct it.

British Association of General Paediatrics

1521

SCREEN TIME AND DELAYED DEVELOPMENT IN TODDLERS – IS THERE A LINK?

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Background Children and young people are growing up in an environment where screens are abundant, and such devices are being used and improved at a rapid rate. The COVID-19 pandemic has exacerbated this problem with the widescale introduction and significantly increased use of initiatives such as online learning. Due to measures such as lockdown and people having to remain indoors and at home as much as possible, many new mothers have found it hard to engage and stimulate their young children without using devices with screens.