neuromotor problems. Targeted intervention can be offered to those with abnormal findings improving final outcome.

Quality Improvement and Patient Safety

1305

STAFF WELLBEING AND TEAM MORALE DURING THE COVID-19 PANDEMIC AT BIRMINGHAM CHILDREN'S HOSPITAL

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Background Covid-19 has significantly impacted the nations day-to-day life and inevitably affected the workplace too. The NHS has been under visible unprecedented stress and consequently staff have carried the burden. The general paediatricians at Birmingham Children's Hospital wanted to understand how the medical staff felt they could be supported during this difficult time

Objectives To assess the wellbeing and team morale amongst medical staff within the General Paediatrics team at Birmingham Children's Hospital (BCH) during the Covid-19 pandemic and implement a new method to improve wellbeing and team morale.

Methods A questionnaire was created and distributed to the medical staff working within the General Paediatrics team at BCH. Questions were formulated following research relating to existing staff wellbeing questionnaires and current literature regarding the effects of Covid-19 on mental health, wellbeing and team morale.

Results Twenty-two staff members completed the questionnaire which represented their experience over the last month. Fifteen (68.2%) looked forward to going to work and nineteen reported feeling 'happy, smiling and laughing at work' when asked. However, 27.3% only felt appreciated at work a few times a month or less and 31.7% stated that their good work was acknowledged less than a few times a month. Twelve felt that they needed someone to talk to at work and four felt unable to confide in a colleague at least a few times a month. 50% felt then needed some time alone during a break at work. 81.8% admitted that Covid-19 had affected their mental health or wellbeing, 50% felt socially isolated as a result of Covid-19 and 95.5% felt worried about their health of the health of family/friends as a result of Covid-19. Seventeen staff members felt that Covid-19 had affected team morale and eighteen felt that knowing their colleagues better would improve team morale and make them more likely to confide in them if needed.

Conclusions This evaluation highlights that the majority of staff at BCH felt Covid-19 had affected their mental health, wellbeing and the General Paediatric team morale. It stressed the importance building colleague relationships to support each other during this worrisome time. A 'Let's Strike Up a Conversation' matchbox activity was created in response to the findings to initiate non-covid and work-related conversation during work breaks. The matchbox had conversation starting 'Match cards' within to stimulate and improve team communications and encourage staff to get to know each other. The effects of this intervention are to be evaluated in due course. The assessment of staff wellbeing and team morale has highlighted the importance of actively surveying the team during new and unexpected changes/circumstances.

Early recognition facilitates early response and adjustments to boost team morale and wellbeing.

British Association of Perinatal Medicine and Neonatal Society

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USE OF ESTER IMPREGNATED PH STRIPS IN IDENTIFICATION OF GASTRIC PLACEMENT OF FEEDING TUBES IN NEONATES: A DIAGNOSTIC ACCURACY AND PROFESSIONALS' PERCEPTION STUDY

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Background Naso or oro-gastric feeding tubes are essential component of care in providing nutrition and medication in neonatal units. The existing standard pH strips lack sensitivity. As a result, neonates may require re-insertion or some cases require unnecessary x-rays. A new generation of ester impregnated pH strips have been developed, utilising human pre-duodenal gastric lipase (HGL), which is only present in the stomach, to improve sensitivity of the test strips to gastric placements.

Objectives 1) to assess the sensitivity of the novel ester impregnated pH test strip compared to the standard pH strips. 2) to assess healthcare professionals' perception of the standard pH test strips and the ester-impregnated pH strips.

Methods We carried out a prospective observational diagnostic accuracy study at the neonatal units of two NHS hospitals comparing the ester-impregnated strips to the standard pH strips. The primary end point is the sensitivity of the pH tests at the recommended pH cut-off of 5.5. We also carried out an online survey with healthcare professionals involved in the study to qualitatively assess through validated scales their perceived usability, trust and acceptance of the standard pH test strips and the general perception of the HGL, enhanced pH test strip. The study was funded by NIHR Innovate UK, received research ethics approval from HRA (REC ref: 19/LO/1726) and was registered in the clinicaltrials.gov website (NCT04271995).

Results A total of 233 samples were collected from 141 infants with the median gestation age of 32 weeks (range 23–41 weeks). The sensitivities of the standard and novel pH tests were respectively 82.0% (95% CI: 77.0%-86.9%) and 90.1% (95% CI: 86.3%-94.0%) under pH cut-off of 5.5. Term babies had significantly lower pH compared to pre-term babies (mean pH: 3.7 versus 4.3, $p=0.03$). Aspirates from neonates fed by mother or donor expressed milk had significantly lower pH compared to neonates fed by formula milk (mean pH: 4.01 versus 4.78, $p<0.001$).

A total of 17 health care professionals completed the online survey, which reported a high level of perceived usability for the standard pH test strips (82.20%). As well as a

positive level of trust (82.16%), acceptance (84.87%) and a low level of anxiety in use (7.84%). Also, the intention to use the HGL enhanced pH test strip was reported as 84.03%.

Conclusions The novel ester impregnated pH strips can detect gastric placements of feeding tubes in neonates with high level of accuracy and are acceptable by the healthcare professionals involved in neonatal care.

Paediatric Clinical Leaders: Service Planning, Provision and Best Practice

1307

NEW TO THE NHS

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Background International medical graduates (IMGs) are the second largest group of doctors employed by the National Health Service (NHS), constituting around 30% of the junior doctors' workforce. Nevertheless, their recruitment has been vital to the contribution of staff growth in the NHS.¹

IMGs are known to face additional challenges above and beyond those faced by UK medical graduates due to several factors. Whilst they are a heterogeneous group of professionals, their views on what they face, and how they are supported can facilitate effective transition into the culture of the NHS and UK medical practice.² During the delivery of human factors training, IMGs shared specific challenges they had faced. We felt it would be useful to look at these challenges in order to be able to provide targeted training.

Objectives To explore the challenges that face IMGs doctors.

Methods An electronic survey was distributed to doctors who have been in the UK for less than three years identified through groups of colleagues. Based on the results, we planned to design a starter course.

Results The survey got 40 responses received from doctors who have been in the UK for less than 3 years. Just over half started at a registrar level and 48% started at a district general hospital. Unsurprisingly for 90%, English was not their 1st language. For over half this was their first time abroad. 30.6% of the doctors reported that the most significant difference in the NHS system from their previous experience is the way of the communication and 25% felt that the social culture is more distinct. Although 22.2% felt that the language barrier was the main difficulty that they faced, 16.6% & 25% experienced more difficulties in adjusting to the culture and understanding how to interact with colleagues. Of good notice, 55.56% and 52.78% reported that the support from colleagues and the daily learning respectively were the most helpful ways to cope and conquer through their transition period.

Based on these results, one-to-one mentoring was provided for a couple of new colleagues who joined the trust. Later on, we designed a course and working on a booklet with the same purpose.

Conclusions Working in a new environment can be challenging. This study highlighted the commonest difficulties that face the IMGs. This has led to the provision of one-to-one peer mentoring in some areas. We are using this material in addition to specific examples to design role-play simulation to

address these specific learning needs, particularly in the often complex paediatric communication scenarios.

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D BEFORE C? SURVEY OF THE APPROACH TO PASSIVE HYPOTHERMIA IN RESUSCITATION IN PAEDIATRIC AND NEONATAL PRACTITIONERS IN NORTH WEST ENGLAND

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Background Therapeutic hypothermia is now an established practice for the management of newborns with hypoxic-ischaemic encephalopathy by providing active cooling. Passive cooling is an interim measure performed once the decision has been made to actively cool the neonate while the newborn is awaiting transfer from special care baby units/local neonatal units to tertiary units or within the same institution, from the delivery unit to the intensive care unit to receive active therapeutic cooling.

Because of its potential harm on reducing cardiac output and lower arterial oxygen levels, experts recommend (NLS, TOBY register) commencing cooling only after resuscitation is complete. In spite of the clear guidance, practices have been observed amongst neonatal medical staff deciding to passively cool infants during active resuscitation.

Objectives We conducted a regional survey to estimate the extent of conflicting opinions which would help generate a discussion and help clinicians in making an informed decision.

Methods A questionnaire was constructed on the Survey Monkey website. It was initially disseminated in 2015 by paper and/or electronically to regional paediatric and neonatal consultants, doctors in training (ST1–8), Clinical Fellows, and Advanced Neonatal Nurse Practitioners based in North West England. To mimic real-life clinical situation, respondents were asked whether they would consider cooling during active resuscitation of a baby with severe HIE.

The survey was repeated in 2019 to review the impact of NLS and increasing understanding of therapeutic hypothermia.

Stata version 15.1 was used to summarise data and conduct significance tests. Differences in the binary outcome (yes or no) were tested using chi-square (χ^2), by year and medical grade. To test for the impact of experience and knowledge bases, a test for linear trend ordered group by medical-grade (excluding ANNP and CF) was analysed using the command *nptrend* (non-parametric test for trend across ordered groups).

Results 44 and 59 medical practitioners in 2015 and 2019 responded to the survey. The proportion answering 'No' was 50% in 2015 and 66.1% in 2019 (p-value = 0.100). There was no significant difference in response according to medical