Paediatric Educators’ Special Interest Group

1327 NEONATAL SIMULATION FORTNIGHT: USING SIMULATION TO IMPROVE NEONATAL RESUSCITATION SKILLS
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Background Junior doctors understandably find performing resuscitation skills a considerable source of stress (Scott et al., 2013). This is increased for those required to deliver neonatal life support but are unfamiliar with paediatrics, such as GP or foundation trainees. While resuscitation training is often incorporated into induction, research has shown that frequent reinforcement is necessary to maintain these skills (Berden et al. 1993). Previous research has demonstrated that simulation allows for faster learning and greater retention of knowledge (Knowles 2013). The implementation of an induction neonatal simulation for non-paediatric doctors resulted in increased confidence in attending deliveries (Peacock et al. 2016).

In our hospital, basic NLS forms part of GP/foundation trainee induction. However, as significant time may pass before these skills are utilised, we incorporated a refresher neonatal resuscitation simulation programme halfway through the rotation.

Objectives We wanted to ascertain whether the introduction of an intensive neonatal simulation programme primarily aimed at GP and foundation trainees would improve confidence and skill in neonatal resuscitation.

Methods Simulation scenarios were developed using common neonatal emergencies and local incidents. Simulation sessions were held post-handover each morning for 2 weeks. Though scenarios were primarily aimed at GP and foundation trainees, all members of the neonatal resuscitation team were involved, including registrars, SCBU nurses and midwifery team members. The simulations were facilitated by medical education fellows trained in debrief, with expert clinical input provided by Paediatric Consultants. Key learning points were themed, summarised, and shared with the team. Daily feedback was collated, and written feedback was obtained after completion.

Results Feedback was extremely positive, with juniors feeling more confident immediately after, as they were ‘allowed to make mistakes in a controlled environment’ and learn from them. Simulation was unanimously preferred after handover, due to improved access and minimal clinical obligations. All juniors agreed ‘it was great learning’ and suggested it continue for the new SHO’s. Learning points included: communication, role allocation and calling for help early. We later received written examples of how simulation had positively influenced personal clinical practice. One participant reflected on a neonatal emergency, stating ‘what helped me the most through this resus was remembering that I would just have to go though it the way I’d gone through it in sim’. Other positives included an appreciation for the opportunity to practice with an MDT approach and reiteration of key learning points. Main barrier identified centred on the tension between service delivery and education.

Conclusions Neonatal SIM Fortnight allowed key learning to be revisited in short, daily sessions over a 2-week period. Feedback and subsequent influence on clinical practice demonstrated the effectiveness of Neonatal SIM Fortnight via behavioural change and clinical results, as per levels 3 and 4 of Kirkpatrick’s evaluation model (1959). The simulation programme has been adapted for additional use at the beginning of rotations to support new junior trainees. We anticipate that neonatal simulation fortnight will continue to improve the neonatal resuscitation skills of junior doctors in paediatrics.

Quality Improvement and Patient Safety

1328 IMPLEMENTING NEUROPROTECTIVE DEVELOPMENTAL PROCEDURAL TECHNIQUES IN NEONATOLOGY: EMBRACING CHANGE – A QUALITY IMPROVEMENT PROJECT
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Background Integrative developmental care in neonates promotes neuroprotective interventions for optimum neurological growth and development. Adherence to neuroprotective techniques ensures high quality individualised care during routine procedures. However, common procedures like capillary blood sampling are often done by junior doctors and nurses without proper training. This can result in inadequate sampling volumes, false laboratory results and complications such as pain and bruising.

Objectives This project aims to develop systems in place, embedding developmental care procedures in practice, to ensure safe and family integrated care in the neonatal environment.

Methods A learning pack was developed to use evidence-based developmental care practice of capillary blood sampling and lumbar puncture on the neonatal unit. Training sessions were organised to familiarise newly posted GP/FY2, specialty doctors and nurses to the developmental care techniques. YouTube videos, social media and online conferencing tools were used to disseminate and reinforce teaching and training along with competency assessments. Quality improvement methodologies such as PDSA cycles and implementation of evidence-based interventions were used to drive improvement and implement
change. Feedback collated pre and post-training sessions were used to inform gaps in services and to improve changes.

**Results** Three training sessions were organised over 6 months, feedback was collected using a survey link and analysed. A more than 20% increase in confidence in performing the procedures with neuroprotective techniques was noted in the attendees. Over 95% of the attendees thought of the training as beneficial and found that the neuroprotective technique was easy to follow and resulted in procuring adequate blood sample. The feedback and suggestions were implemented and a new local guideline was generated for capillary blood sampling.

**Conclusions** Good compliance with the neuroprotective techniques for the routine procedure was demonstrated in the initial pilot phase. Our next target is to ensure sustainability. A regular training session before every new rotation of doctors and nurses will ensure this along with parent engagement.

**Abstract 1330 Table 1**

<table>
<thead>
<tr>
<th>Question</th>
<th>Mean Score</th>
<th>Median</th>
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<tbody>
<tr>
<td>Would you agree that, overall, the neonatal intensive care environment has been supportive through the pandemic?</td>
<td>61.53 (SD 21.5)</td>
<td>65</td>
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<tr>
<td>Do you agree access to PPE (Either regular items such as scrubs or specific items such as N95 masks) improved over the course of the pandemic?</td>
<td>59.4 (SD 26.3)</td>
<td>66</td>
</tr>
<tr>
<td>Has access to the usual range of bedside equipment (Such as ventilators or IV lines) changed from pre-pandemic?</td>
<td>38.2 (20.1)</td>
<td>Median 36</td>
</tr>
<tr>
<td>Has the pandemic had an emotional effect on you through your work in the NICU?</td>
<td>30.1 (SD 15)</td>
<td>Median 30</td>
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There were a series of Likert-scale question, with 0 = ‘Completely disagree’ and 100 = ‘Completely agree’.

**Conclusions** All NICUs have made significant adaptions to their operating procedures and sought to support their staff through the pandemic, and these data suggest that this is recognised by the majority of participants. This is necessary but not sufficient. The successes we can demonstrate in the logistical response must be taken in context of a global change affecting staff’s physical, psychological and social circumstances which changes their relationship with the NICU. In future work, we aim to use quantitative and qualitative analysis from this survey in order to better understand the current state of staff wellbeing, the nature of the difficulties experienced by staff and their perception of the interventions used to support them.

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**British Association of General Paediatrics**

**1332 UNITED KINGDOM NICE HEADACHE QUALITY STANDARDS APPLIED TO GENERAL PAEDIATRIC CLINICS: ROOM FOR IMPROVEMENT**

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**Background** Headache is one of the most common presentations in children.

**Objectives** This registered clinical audit explores the management, and outcome of cases referred to secondary care paediatric clinics.

**Methods** We reviewed 35 consecutive patients referred to secondary care paediatrics over 4 months from August 2018 to November 2018. We extracted data on demographics, symptoms at presentation, diagnosis, indication for MRI, treatments recommended, and outcomes. Our audit of process was based on NICE Quality Standards, for people age 12 and older.

**Results** 20/35 (57%) were females, and the mean age was 11 years old at initial visit. Within 12 months of the initial visit 18/35 (51%) had headache diagnosed but unclassified, 7/35 (20%) were diagnosed with migraine with or without aura, and 1/35 (3%) with migraine and tension-type headache. 3/35 (9%) were diagnosed with secondary headache, 3/35 (9%) were diagnosed...