total MRI brains ordered from the department). The included studies made up ~44% of total MRI ordering for the department and 73.8% of MRI brains ordered in total.

**Conclusions**

No studies performed in the absence of meeting RCPCH-Headsmart guidelines were found to have a space-occupying lesion indicating that these guidelines represent a sensitive decision support tool for intracranial mass albeit with low specificity. Given the limited availability of MRI brain in most departments use of this modality should be reserved for children who meet these criteria.

**REFERENCES**


**British Association of Perinatal Medicine and Neonatal Society**

**EXPLORING THE ROLE OF BREAST MILK FORTIFIER IN NEONATAL OUTCOMES IN PRETERM NEONATES, A 10 YEAR RETROSPECTIVE AUDIT**

Kate Jordan, Laura De Rooy, Anay Kulkarni. St George’s University Hospital NHS Foundation Trust

10.1136/archdischild-2021-rpch.602

**Background**

Breast milk fortifier (BMF) helps maintain adequate nutrition in preterm infants, which is crucial for their physical and neurodevelopmental outcomes. However, conflicting reports have linked BMF with the development of necrotising enterocolitis (NEC), a devastating condition with high morbidity and mortality among neonates.

**Objectives**

We undertook a ten-year retrospective analysis in our tertiary Neonatal Unit (NNU) in London, United Kingdom (UK) to evaluate the association of BMF use in preterm infants with various neonatal outcomes. We primarily examined if BMF use is associated with the development of NEC, as well as with the development of the more high-mortality group of patients who develop surgical NEC. We also examined if there is an association between BMF use and all-cause mortality.

**Methods**

The audit cohort included babies born at St George’s Hospital, London, UK, between gestational ages 23+0 and 31+6 weeks, admitted to the NNU from January 2010 – September 2020, who had been discharged or were deceased (N=952).

Data was collected from the electronic neonatal database system (Badgernet UK). BMF use and NEC were confirmed from clinical notes and NEC was stratified by severity; those with NEC, Bell’s stage II and above were included.

Statistical analysis: odds ratios and risk ratios were calculated with corresponding confidence intervals and number needed to treat (where applicable). Subgroups for analysis included all gestational ages, and those with gestational ages between 23+0 – 25+6 weeks, 26+0 – 28+6 weeks, and 29+0 – 31+6 weeks.

**Results**

This audit established that BMF has been increasingly used in preterm infants from 2010 – 2020 (10.5% of preterm infants on the NNU in 2010 received BMF, compared to 45.8% in 2020). Contrasting, NEC rates on the NNU have remained stable across the 10 year audit timeframe (6.3% from 2010 – 2014; 5.8% from 2015 to 2019).

Use of BMF did not increase the odds or risk of developing NEC (OR 0.62, CI 0.30 to 1.29; RR 0.64, CI 0.32 to 1.28). BMF use in preterm infants was associated with a reduced risk of developing surgical/severe NEC (RR 0.24, CI 0.06 to 0.99, P 0.05, NNT (benefit) 18.04 – 344).

Furthermore, BMF did not lead to an increased risk of all-cause mortality in preterm infants across the ten year audit (RR 0.31, CI 0.15 to 0.63, P 0.001, NNT (Benefit) 7.95–27.42).

Extremely premature infants, born <26 weeks gestation, had less risk of developing NEC if on BMF (RR 0.36, CI 0.16 to 0.90, P 0.01, NNT (Benefit) 4.97–30.3).

**Conclusions**

BMF use in preterm infants on our NNU from 2010–2020 was not associated with an increased risk of NEC development, nor an increase in all-cause mortality. This was true for all subgroups analysed.

Further work is being undertaken to examine the possible protective effect of BMF in some patients.

**RCPCH Trainees Committee**

**LEAP INTO LEADERSHIP! SUPPORTING TRAINEES WITH THE TRANSITION TO WORKING AS A PEDIATRIC REGISTRAR**

Shona LC Brothwell, Laura Duthie, Isobel Fullwood, Sean Monaghan, Hannah Cooper, Davina Kenyon-Blair, Emily Botcher, Laura Kelly, Sebastian Brown, Matthew Caswely, Penny Broggio. West Midlands School of Paediatrics

10.1136/archdischild-2021-rpch.603

**Background**

Stepping up to the role of Paediatric Registrar is a juncture that many trainees find daunting; adequate support is essential to ensure a smooth transition. Working effectively as a new Registrar requires a range of non-technical skills in addition to clinical knowledge and skills. Some of these important non-technical skills are not covered during regional or departmental teaching, nor routinely addressed during Supervised Learning Events or Supervisor meetings.

**Objectives**

Keen to improve the trainee experience of transition, and to level the playing field for trainees who do not have access to informal sources of information and support, we created the ‘LEAP into Leadership! ST3–4 Transition Day’, broadly covering Leadership skills, Educational tips, Acute assessment tips, and Personal/team wellbeing (LEAP).

**Methods**

Trainees who were stepping up to work as Paediatric Registrars at any point over the following 12 months were invited; 23 trainees attended the day, which was delivered in August 2020 via Zoom. The impact of the Transition day was evaluated using pre- and post-course surveys.

**Results**

Pre-course survey results indicated that 65% (n=15) of trainees thought Level 1 training had prepared them for the transition. However, 100% (n=23) of trainees reported feeling anxious, and 47% (n=11) did not feel confident about the transition. We enquired about previous teaching on pertinent topics; the percentage of trainees reporting that they had received teaching on each topic was as follows: effective hand-over: 53% (n=9 out of 17 responses), safety-netting: 24%
Post-course survey results showed that 100% (n=23) of trainees felt they had a better understanding of what is expected of a new Registrar after attending the day. Trainees found it useful reflecting on the potential challenges of stepping up and having time to discuss these with more senior trainees (100%; n=23), and stated that they felt less anxious and more confident about stepping up after attending the day (96%; n=22). Comments included ‘reassuring to hear that a lot of the worries I have about stepping up are common’, ‘useful hearing personal accounts from current registrars, obstacles they faced and strategies to overcome them’, and ‘helped me plan how I am going to approach these situations with greater organisation, situational awareness and a more holistic approach - thank you!’.

Conclusions We have developed a new, trainee-led day to support trainees in our region with the transition to working as a Paediatric Registrar. Feedback demonstrates that trainees found the day valuable, resulting in reduced anxiety and improved confidence about the transition. Trainees found the near-peer support aspect of the day especially useful, in addition to the practical tips relating to topics such as resuscitation, leading busy shifts, safety-netting, delegation, complaints, and wellbeing. The Transition day will be embedded within our regional teaching programme; additional work to further boost peri-transition support is in progress.

One trainee mentioned the benefit of a renewed passion for a career in paediatrics, without which an individual may have considered leaving training; thus demonstrating the wider benefit for the WMD. The only negative mentioned was that the trainee with health issues struggled with signposting for medical care when they became unwell.

Three of the interviewed trainees have since gained their certificate of completion of training (CCT); all mentioned their OOPE at consultant interview and felt it gave them a unique talking point.

Conclusions The benefit of this OOPE for WMD paediatric trainees is considerable. The partnership will address supervision and signposting for the placement, as trainees cannot be left unsupported during this time. In an era where many trainees are suffering from burnout, we would recommend that all Deaneries offer something similar to their trainees, where they can learn in a different environment.

‘It made me realise why I did medicine. It was the best medical placement I have ever done.’

### Quality Improvement and Patient Safety

#### Abstract 1384 EVALUATION OF INTERAGENCY SAFEGUARDING REFERRAL FORMS FOR CHILDREN AT A DISTRICT GENERAL HOSPITAL

**Background** Child protection and safeguarding is paramount to the role of all paediatricians. Recognising, communicating, and addressing safeguarding concerns effectively is necessary to protect vulnerable children and their families from harm. This ensures children ‘grow in a safe environment’ as described by the RCPCH.

**Methods** We conducted a descriptive evaluation of our safeguarding forms at our hospital, focusing on safe and effective communication between the interagency partners involved in safeguarding children.

**Results** Our evaluation identified several areas for improvement, including

- Improving the clarity and accessibility of the safeguarding forms
- Enhancing the interagency coordination and communication
- Strengthening the involvement of all partners in safeguarding

**Conclusions** The findings indicate the need for ongoing improvements to safeguarding forms to ensure effective communication and interagency collaboration in protecting children.

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**Abstract 1383 Table 1 Positive impact on trainees**

<table>
<thead>
<tr>
<th>Domain</th>
<th>Benefit to Trainees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical</td>
<td>Increased knowledge of tropical medicine</td>
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<tr>
<td></td>
<td>Improved acumen in the absence of investigations</td>
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<tr>
<td></td>
<td>Improved decision-making and procedural skills</td>
</tr>
<tr>
<td></td>
<td>A calmer approach to sick patients</td>
</tr>
<tr>
<td>Communication</td>
<td>Improved communication where language, health beliefs and understanding is difficult</td>
</tr>
<tr>
<td></td>
<td>Understanding how to manage calls from juniors overnight</td>
</tr>
<tr>
<td>Leadership</td>
<td>Increased confidence leading arrest calls</td>
</tr>
<tr>
<td></td>
<td>Experience in mentorship (each registrar is assigned a medical student to mentor)</td>
</tr>
<tr>
<td></td>
<td>Wanting to create a positive working atmosphere</td>
</tr>
<tr>
<td>Teaching</td>
<td>Increased confidence in teaching abilities</td>
</tr>
<tr>
<td></td>
<td>Developed strategies for engagement</td>
</tr>
<tr>
<td></td>
<td>Flexibility of teaching methods to suit audience</td>
</tr>
<tr>
<td>Governance</td>
<td>Led to first publication for some trainees</td>
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<tr>
<td></td>
<td>An interest in research</td>
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<tr>
<td>Personal</td>
<td>Renewed enthusiasm for medicine</td>
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<tr>
<td></td>
<td>Appreciation of how resilient people can be</td>
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<tr>
<td></td>
<td>Ability to appreciate the little things</td>
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<tr>
<td></td>
<td>Adaptability to different environments</td>
</tr>
</tbody>
</table>

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