Paediatric Educators’ Special Interest Group

**SIMULATION TRAINING FOR VIDEO LARYNGOSCOPY FOR NEONATAL INTUBATION**

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**Background**
Around 1 in 100 neonates are born requiring extensive resuscitation, including intubation.1 Neonatal intubation is traditionally taught using direct laryngoscopy (DL), and the RCPCH paediatric curriculum emphasises that trainees should be capable of bag/mask ventilating and endotracheal intubation of a neonate. In anaesthetist practice it is encouraged to plan for failure and consider alternate laryngoscopy methods if initial intubation is unsuccessful. Video laryngoscopy (VL) may allow faster time to best view and better views compared to direct laryngoscopy (DL) during intubation of the anatomically normal neonate.2 Furthermore, VL can be effective for training purposes allowing real-time feedback from senior colleagues and quicker acquisition of intubation skills.3

**Objectives**
The primary objective is to educate paediatricians to use VL. The secondary objective is to assess change in opinions and confidence in VL following simulation training.

**Methods**
Within a district general hospital, 17 participants including 12 paediatric trainees and 5 non-trainee participants (consultants, physicians associates and medical students). Each participant completed a pre and post simulation questionnaire, which included assessment of prior VL education and experience, understanding of planning for failure and confidence in VL technique. Low fidelity simulation training of VL (MacGrath) and airway adjuncts was undertaken by paediatric and anaesthetic colleagues.

**Results**
Of the participants, 8/17 (47%), including only 3/12 (25%) of the trainee group, had received previous training in VL, and 5/17 (29.4%) had previously used VL during real time intubation. In the pre-education group, 4/17 (23.5%) preferred initial intubation attempts using VL, which increased in post education group to 8/17 (47%). In the pre-education group, 6/17 (35.2%) stated they would choose VL for second intubation attempt, which increased in the post-education group to 15/17 (88.2%). In the pre-education group 4/18 (23.5%) stated they would be confident in using VL for second intubation attempt, which increased to 13/17 (76.4%) in the post-education group.

**Conclusions**
VL is a beneficial tool for neonatal intubation and non-invasive surfactant administration, and is a useful for allowing real-time feedback on the procedural skills from a supervising senior. In our study, we demonstrated that VL training and experience wasn’t extensive, and following a short education programme, confidence and enthusiasm for VL increased.

**REFERENCES**

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**ADVERSE CHILDHOOD EXPERIENCES (ACES) AWARENESS: A TRUST-LEVEL EVALUATION**

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**Background**
Adverse Childhood Experiences (ACEs) are events that can potentially cause lasting adverse impact in later life. By identifying ACEs early in the course of a child’s clinical encounter, healthcare members are in positions to help direct appropriate support to the child and family.

**Objectives**
To measure ACEs-awareness levels among healthcare staff dealing with children. To identify barriers preventing healthcare staff from identifying and proactively implementing interventions when encountering ACEs in clinical practice.

**Methods**
A questionnaire survey, held over 7 weeks, was sent to medical staff in acute paediatrics, neonatology, community paediatrics, emergency medicine, and acute maternity services. Email invitations to a GDPR-compliant survey platform was distributed, upon approval from various departmental safeguarding leads. Results were consolidated and analysed using Excel software. Respondents from CAMHS were excluded due to CAMHS operating under a different trust.

Participants were asked about their current awareness of ACEs and their confidence levels using ACEs in their daily clinical practice; where they had received their ACEs-training; and whether they were keen to attend ACEs-training. They were also asked to select from a list, what would be classified as ACEs.

**Results**
87 respondents out of 283 invites (31% response rate) were received. 38 responders (44%) were Nursing staff, 7 (8.0%) were Midwifery staff, 16 (18.5%) Consultants, 2 (2.3%) associate specialists, 15 (17%) specialty registrars, 5 (5.7%) senior house officers, 1 (1.1%) foundation doctor, and 3 (3.4%) allied health professionals (dietician, health play specialist, and advanced nurse practitioner).

Most respondents, 34 (39%) had never heard of ACEs. Only 12 (14%) respondents were confident in applying ACEs in clinical practice.

When shown a list of social circumstances and asked to identify which were ACEs, 75 (86%) correctly identified all ACEs in the list. ACEs that were least recognised by respondents were ‘Migration’ (78, 90% had correctly identified this ACE), ‘Parental mental ill-health’ and ‘Bereavement’ (82, 94%).

75 (86%) respondents were unaware of ACEs-training in the Trust. 71 (82%) had never attended ACEs-training before. Of those who did (16; 18%), cited ACEs-training were from Online modules, safeguarding training run by the Local Authority, Royal College of Paediatrics and Child Health Level 4 training, or regional paediatric study days, and trust induction.

79 (91%) respondents expressed eagerness to attend ACEs-training. Of the respondents who expressed ‘No,’ (8, 9%), reasons were: ‘Different priorities,’ ‘Unsure of benefits,’
‘Covered in safeguarding’, and ‘A trauma-informed approach rather than the ACEs model, is better.’

Conclusions ACEs-awareness among healthcare staff working with children is suboptimal, but staff showed eagerness to learn about ACEs. This positive attitude should be further developed by incorporating effective, relatable training sessions either through in-house training, leaflets and posters to raise awareness of intervening and preventing ACEs, or via online Trust or external continuing professional development (CPD) providers’ Learning Modules. As a result of our study, ACEs-training was introduced in Safeguarding induction and training. With more frontline awareness, it is hoped that protective, resilient factors that will help counteract the impact of ACEs can be implemented promptly, into the lives of affected children attending health services.

British Society of Paediatric Gastroenterology, Hepatology and Nutrition

[1034] MIND THE GAP: OUT OF HOURS FEEDING TUBE PROBLEMS

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Background Children within the Belfast trust with feeding tubes, are known to attend the Paediatric Emergency Department with tube related issues, such as dislodgement. But is ED the right place for them to attend?

Objectives To quantitatively assess the attendance at the Emergency Department with a tube related issue.

Methods Community paediatric nursing records were accessed for all patients currently on tube feeds within Belfast trust. Online records were accessed via Northern Ireland Electronic Care Record (NIECR) to ascertain if the patient demographic, and whether the patient had ever attended ED with a tube related issue, and the nature, timing, date and outcome of this event.

Results 79 children were identified within the Belfast trust as currently being tube fed. 7 had inaccessible records. Of the 72 remaining, the type of tube varied, with NG being most common at 34%. This was followed closely by Mini-Button at 30%, Freka (15%), Transjejunal (9%), NJ (5%), Corflo (3%), Monarch (3%) and Mickey (1%).

53% of patients with tubes are male, 47% female.

Over half the children in this population are aged 0–5 years.

On average, the number of attendances to ED with a feeding tube related issue, is 4.2 per child, with a range of 0-30.

The highest number of attendances in the current population group occurred in 2020.

Looking closer at 2019 as a sample year, 60% of the attendances occurred on Monday-Friday, between the hours of 9am-5pm.

Limitations of the study include that it is only current case-load, and not historical cases. Also that some children’s records could not be accessed.

Conclusions There is a large range in number of ED attendances, but the data shows most children will attend ED for a tube related issue in their lifetime. Many of these children have complex medical needs and, particularly during a pandemic, ED is somewhere they should only be if absolutely necessary. So, what are the solutions to this issue?

There is a gap in the service provision for these children. We need a more permanent scheduled service to deal with semi-emergency tube needs. Service planning is currently ongoing to see how the children’s community nursing team could help facilitate an accessible service, during the week, potentially with extended hours to make travelling to ED unnecessary.

Furthermore, it would be useful to evaluate parental education and training prior to leaving hospital, and also community nursing support within the first few weeks, to ascertain if there is need for improve parental confidence and support in dealing with tube related issues.

To further investigate the issue, we could evaluate data on children who historically had tube feeds, but no longer require them, or who have moved trusts, or passed away.

Child Protection Special Interest Group

[1035] WHAT FOLLOWS AFTER HAVING BEEN SHAKEN? – A RETROSPECTIVE REVIEW OF CHILDREN ADMITTED TO HOSPITAL WITH A NON-ACCIDENTAL HEAD INJURY 2018–2020

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Background Children and young people (CYP) who have suffered non-accidental head injury (NAHI) are at risk of short and long term neurodevelopmental consequences; some will have clear neurological problems from presentation whilst others who appear to be neuro-typical following the injury may go on to develop sequelae later in life (Chievengy & Lind). There are national guidelines regarding acute management and the multiagency response but information regarding best practice relating to follow up is less clear.

Objectives Our aim was to review the current literature regarding neurodevelopmental consequences for children following a non-accidental head injury and to assess whether our tertiary service reflected this through the advice and support provided throughout a child’s journey from initial admission to discharge (often to an alternative placement) and the follow up arranged.

Methods We undertook a retrospective review of the notes of children recorded in our Children’s Hospital Brain Injury Team database as having sustained a NAHI between 1st April 2018 and 1st October 2020 (30 months).

Results Out of a total of 290 CYP on the database in this time period, 13 were recorded to have suffered NAHI; On further detailed note analysis 1 was felt, from NAI Peer review, to have had an accidental skull fracture.

Of the 12 cases, 11 were male and there was a median age of 4.5 months. 4/12 were local with the remaining transferred in for tertiary neurosurgical care (median length of stay 8 days; mean 8.8 days). Injuries ranged from skull fracture with no intracerebral bleed to chronic subdural haematoma and extradural haemorrhage. There was one mortality. 9 of