following the introduction of CPIPS. Studies are needed to report holistic outcomes, including chronic medical conditions and the mental health to continue developing a service to support chronic, complex, and life-long conditions.

**G165 USING VIDEO VIGNETTES AND DOCTORS’ RESPONSES TO ASSESS THE EFFICACY OF PAEDIATRIC SIMULATION**

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Aims Paediatric simulation is an established part of medical student training. However there remain many ways to assess its efficacy. We aimed to assess the efficacy of a simulation programme using video-based clinical vignettes and comparing student responses to established paediatric doctors.

Method We created a paediatric simulation programme for 87 fifth year medical students. The programme involved two-hour theory session followed by a two-hour high fidelity simulation in groups of five.

Twelve clinical vignettes were created based on the videos from ‘Spotting The Sick Child’ online resource (with permission). The students stated how sick they thought the child was for each scenario on a scale of 1 to 10, where 10 was ‘immediate PICU admission’ and 1 was ‘immediate discharge’. This quiz was carried out pre- and post-course. Twenty post-MRCPCH paediatricians carried out the same quiz. The average of their scores was considered the ‘gold standard’. The deviation between the paediatrician and student scores was calculated both pre- and post-programme. Students also rated their confidence level in assessing and managing the cases before and after the programme.

Results Overall, students’ responses were significantly closer to the doctors’ mean post session (p=0.0048). This was particularly pronounced in respiratory distress, dehydration and DKA scenarios. The average value of students’ confidence level for assessing paediatric emergencies pre- and post-simulation were 2.91/5 and 3.58/5, respectively (p<0.001). Similarly their reported confidence in managing the emergencies was 2.36/5 pre-session and 3.65/5 post-session (p<0.000005).

Conclusion Video vignettes provided a novel approach to assessing the efficacy of a paediatric simulation programme. Students’ responses more closely correlated with more experienced specialist physicians after the session compared to pre-session. The convergence of the paediatricians’ and students’ scores post-session was validated by the students’ self-reported increased confidence level in assessing and managing the scenarios post-session. This supports the utility of this method for assessing the clinical educational efficacy of paediatric simulation programmes.

**G166 USEFULLNESS OF SOCIAL EMOTIONAL AND ADAPTIVE BEHAVIOUR AS PART OF TWO YEAR NEURODEVELOPMENTAL ASSESSMENTS**

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**Introduction** Neurodevelopmental outcome assessment provides basis for benchmarking and early intervention. Bayleys scale of infant development (BSID) is often used in 2 year assessments of high-risk infants, however there are time constraints in completing these assessments. Social, emotional and adaptive processes like self regulation and executive function which are increasingly being shown to predict later life and behaviour outcomes are often not captured in these assessments.

**Aim** To study if completion of social emotional and adaptive questionnaire of BSIDIII will be useful as part of the 2 year assessments.

**Methods** Social-emotional/adaptive parental questionnaire was given for all preterm born <30 weeks at the 2 year neurodevelopmental clinic. Demographic and infant data was collated along with the composite scores of the cognitive, language and motor, social emotional and adaptive scales of BSIDIII. Moderate delay was defined as composite score of 70–84 and severe delay as <70. Data was analysed using Microsoft Excel and STATA.

**Results** 19/48 (40%) who returned the questionnaire had 2 year assessments at a mean age of 25 months. Table 1 shows the mean composite scores of different scales. There was significant correlation with general adaptive composite (GAC) and motor composite (p=0.04, 95% CI –1.29 to –0.33). A significant correlation was also seen with language composite and social adaptive domain (p=0.042, 95% CI –0.7 and –0.15). There was no correlation seen with social emotional scale and motor/language/cognitive scales.

**Conclusion** Parental questionnaire using the social-emotional and adaptive behaviour items can be used as screening tool to identify high-risk infants requiring speech and physiotherapy intervention. This may allow streamlining of clinics that run the 2 year assessments. This data needs to be validated with a larger cohort.

**G167 PROMOTING TECHNOLOGY ENHANCED LEARNING: ASSESSING VIEWS AND EFFICIENCY OF MOBILE PHONES IN CLINICAL PRACTICE**

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Aims Technology-enhanced learning, specifically the use of mobile devices by Healthcare professionals has transformed many aspects of clinical practice.

Some healthcare organisations are reluctant to advocate the staff use of mobile phones due to the risks associated with...
interference of medical equipment, infection control concerns, and reported parental complaints.

Mobile devices provide a multitude of benefits for clinical staff including increased access to useful apps such as drug-dose calculators, and other validated point-of-care tools, which are of high educational value and have been shown to support better clinical decision making and improved patient outcomes.2

Methods We designed a survey assessing parental and staff perception on the use of mobile phones, using a five point Likert scale. 40 staff and 40 carers participated in the questionnaire.

Following this, we designed two clinical scenario questionnaire. We assessed length of time to complete task and degree of accuracy. Scenario 1 participants were prohibited from using mobile phones. Subsequently, participants were granted access to mobile phones for assistance in Scenario 2.

Results 38/40 (95%) parents surveyed felt that healthcare professionals should be allowed to use mobile technology in a clinical environment. Similarly, of the 40 staff members surveyed, 39/40 (97%) felt access to mobile phones for clinical reasons was appropriate.

For the drug administration scenario (performed by nursing staff), all participants were quicker using mobile phone for assistance. The average length of time was 1 min 22 s quicker. Task accuracy was maintained at 100% with and without mobile phone use.

For the prescriber scenario (performed by medics and non-medical prescribers), again all participants were quicker using mobile phone aide, with an average length of 1 min 26 s quicker. Accuracy of 100% was maintained in both cohorts.

Conclusion Despite previous reported parental concern, this survey highlights the strong carer support for healthcare professionals appropriately using mobile phones in clinical areas. Staff members were similarly keen for the use of mobile technology to aid their practice.

We have demonstrated an improvement in efficiency of performing clinical tasks with the assistance of mobile phones, ensuring accuracy was maintained. The appropriate use of mobile phones promotes well-informed, safety-conscious, technology-assisted, effective clinical care.

REFERENCES


AN OBSERVATIONAL STUDY OF CLINICIAN’S GAZE BEHAVIOUR DURING SIMULATED PEDIATRIC EMERGENCIES

G168

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Aims Clinicians collect, prioritise and respond to visual cues when making decisions about patient care. This is of particular importance in the resuscitation environment where they are required to absorb and process large volumes of complex visual information in a time critical manner. Eye tracking technology allows for the measurement of an observer’s point of gaze based on where their pupil is focused. Eye tracking technology has been used in aviation and surgery to describe differences in the gaze behaviour between experts and novices. The aim of this study was to describe the gaze behaviour of clinicians from different training backgrounds during a simulated paediatric emergency.

Methods Twenty-seven clinicians from different clinical areas within a tertiary children’s hospital undertook a standardised, six minute, high fidelity simulated paediatric emergency. Participants wore SMI Eye Tracking Glasses. We measured the number of times participants looked at predefined key areas (fixation count) and the duration of time spent looking at each of these areas (dwell time). The time taken to key clinical interventions was also recorded.

Results Participants from all groups looked more frequently and for longer at the patient (chest and airway) than any of the other key areas of interests. Paediatric Intensive Care Unit (PICU) consultants focused longer on the chest and airway than any other groups. The gaze behaviour of paediatric consultants and trainees was similar. Both groups spent longer looking at the defibrillator and algorithm (51,180 ms and 50,551 ms respectively) than the PICU consultants and consultants in paediatric emergency medicine (19,804 ms and 28,095 ms respectively). The PICU consultants were quickest to perform key clinical interventions.

Conclusions This study is the first to describe differences in the gaze behaviour between clinicians from different backgrounds during a simulated paediatric emergency. Differences observed between experts and novices are similar to those described in aviation and surgery. Further research is needed to evaluate the potential use as an educational tool in the resuscitation setting.

G169(P) ACTUP – AN INTERDISCIPLINARY APPROACH TO PREPARING SENIOR PEDIATRIC TRAINEES FOR CHALLENGING CLINICAL SCENARIOS

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Aims In recent years there has been an increasing recognition of the importance of non-technical skills training in medical education. Strong communication and interpersonal skills are crucial to good clinical practice. These are of particular relevance when communicating with team members, parents and patients in challenging situations. We identified a lack of postgraduate training opportunities for paediatric trainees to develop these skills. Our aim was to devise an interdisciplinary training opportunity which would enable senior paediatric trainees to develop their communication skills by undertaking simulated scenarios based on challenging clinical situations.

Methods Level 3 trainees in our deanery were invited to attend the ACTUP course. We recruited a diverse faculty consisting of paediatricians, paediatric nurses, social workers and psychologists. In a unique collaboration, we worked closely with drama students from our local university. The drama students acted in the role of parents for the simulations. The