Lost in the Scenario: Losing Sight of the Patient When Using a Structured Prescription Chart

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Background Insulin is a dangerous medication and prescribing errors associated with its use can have life-threatening consequences. Holistic prescribing requires involvement of the patient and their family in the process as well as prescribing the medication safely. An insulin prescribing chart structures the task of prescribing insulin but there is a lack of research on its impact on the doctor’s behaviour.

Aim To explore how a prescription chart structures the task of prescribing insulin

Methods Qualitative study involving interviews with seven doctors who routinely prescribe insulin for children. Two phase interview: phase one ‘free association’ interview where doctors described their approach to insulin prescribing; and simulated prescribing task using ‘think-aloud’ methodology, where doctors verbalised their reasoning while completing an insulin prescription. Interview transcripts were thematically analysed, guided by existing published prescribing frameworks. Doctors’ approaches during each interview phase were compared, supported by content analysis of coded data.

Results The introduction of the prescription chart changed the behaviour of doctors while prescribing. Their behaviour moved from a holistic approach to a much narrower, task focused approach to prescribing. Fewer doctors verbalised any intent to interact with the patient while prescribing for them and checked fewer aspects of their prescription when presented with the chart. They moved from a holistic approach to a goal orientated one.

Conclusion This study has shown that the use of a prescribing chart changes doctors’ behaviours. Training doctors to use prescribing charts in isolation may de-emphasise the importance of patient engagement. We recommend patient centred prescribing education for medical students and doctors. This may involve a staged progression from prescribing in the classroom setting, to prescribing with a simulated patient, to opportunities to prescribe in the clinical context with supervision.

Introducing a Minimum Accepted Competency (MAC) Exam for Commencing Supervised Paediatric Practice

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Aims To determine if undergraduate students and paediatric trainee doctors level of knowledge meet a non-faculty clinician-determined minimum accepted competency (MAC).

Methods A 30-item multiple-choice (MCQ) paper (MAC exam) was created, formed of questions proposed by practising non-academic consultant paediatricians, which are deemed as ‘must know’ for paediatric trainees prior to commencing clinical work.

A ‘passing score’ was determined using the Angoff technique by the paediatric faculty.

The paper was given to undergraduate students following their formal paediatric teaching and also paediatric senior house officers (SHO’s).
Student’s performance on the MAC was compared with their performance on their official university examination. Test item analysis and psychometrics were also performed.

**Results** The passing score was determined at 13/30 (41.2%).

366 undergraduate students sat the exam. Their mean score was 45.9% (s.d 9.9%, range 23–73%). 240/366 (65.4%) of students achieved the passing score whereas 99% of these students passed their official university exam. However, there was a positive correlation between students result in the MAC exam and results from their official university exams (spearman R=0.44, p<0.01).

58 paediatric SHO’s sat the exam. Their mean score was 64.2% (s.d 11.8%, range 40–80%) which was significantly better than undergraduate students (p<0.01).

After ranking test item difficulty, there was a positive correlation in responses between the students and the SHO’s (spearman R=0.73 (p<0.01).

We identified a pattern of consistently poorly answered questions in order to highlight areas of a knowledge deficit.

**Conclusion** This is a novel approach to paediatric assessment, enabling clinicians as opposed to academics to design the content.

The MAC exam is more difficult than expected and both students and SHO’s found the same questions challenging.

Students results were significantly worse on the MAC compared with their official university exam. We need to explore further if this is due to a lack of knowledge (requiring curriculum change) or unreasonable expectations from clinicians.

The MAC exam showed reproducible results but other psychometric properties are not yet strong enough for it to be considered as a high stakes assessment tool in its current format.

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**GP150 SUPERVISED LEARNING EVENTS: TRAINEES VIEW POINT**

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**Introduction** Supervised Learning Events (SLEs) were introduced into post graduate training to complement competency-based medical education. SLEs were designed to have formative educational discussions between trainees and trainers. These involve checklists and judgments made on rating scales. This gives the process a subjective edge and can lead to trainees seeing them as merely tick box exercises for progression in training. We set out to evaluate Paediatric trainee perceptions of SLEs in Wales.

**Methods** An anonymous 10-item mixed methods cross-sectional survey questionnaire was devised and distributed amongst Paediatric trainees in Wales. Ethical approval was obtained and data was collected over a two month period.

**Results** 24 trainees responded to the survey. Only 38% respondents felt SLEs have positive educational value. Of the remaining 28% felt SLEs weren’t educationally productive and the rest had a neutral opinion. Difficulties in completing SLEs were a common theme. 62% felt assessors lacked time to do SLEs constructively. Finding a willing assessor in busy clinical areas was a common concern. Most trainees reported a summative attitude from trainers.

**Conclusion** The survey results are in line with the gathering evidence that SLEs need an urgent overhaul. For trainees to understand the educational value of SLEs there needs to be a change of direction from trainers. There is need for training at both levels to make SLEs more robust and multifaceted. Trainees in Wales have suggested how simple improvements can be made to enhance learning via SLEs.

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**GP151 USING A MODIFIED-TOSBA APPROACH TO PROVIDE TIMELY, FORMATIVE FEEDBACK TO MEDICAL STUDENTS – 18 MONTHS EXPERIENCE IN TERTIARY PAEDIATRICS**

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**Background** Medical student numbers have increased, and medical degree course duration has decreased over recent years. This leads to reduced bedside teaching opportunities which has been implicated in a reduction in clinical skills. In addition, students’ desire to receive formative feedback is well documented. Team objective structured bedside assessments (TOSBA) involves structured feedback on observed clinical tasks performed on patients in the small-group clinical tutorial setting.

The paediatric rotation in our institution includes six weeks of neonatal and paediatric hospital attachments. Students spend a third of their rotation in tertiary paediatric hospital. Each student is scheduled for two bedside tutorials with each clinical lecturer. In order to provide consistent formative feedback for all students, a decision was made to adopt a modified TOSBA approach to these learning experiences.

**Methods** A structure for the 60-minute mTOSBA bedside teaching sessions was agreed. Students were briefed on the structure of the session. Within each tutorial group, half the students were observed taking a focused history and the other half performing clinical examination. Tutors facilitated a verbal debrief immediately following the bedside session. In addition, each student received individualized, written, formative feedback. The emphasis was placed on providing formative feedback on communication and clinical skills rather than knowledge; in this way it differed from the original TOSBA described by Miller et al.

**Results** Over the first 18 months, almost 500 students have attended 1 or 2 mTOSBAs during their tertiary paediatric clinical rotation. Challenges encountered are typical for any bedside teaching session in terms of patient access and interruptions. Specific to mTOSBA, delays in providing written feedback and additional workload for clinical lecturers were noted. After the first year, written feedback was incorporated into the students’ portfolio leading to more timely written feedback and reducing duplication of tasks by clinical lecturers. Verbal feedback from students on this mode of teaching has been positive.

**Conclusions** Formal evaluation of the acceptability and utility of mTOSBA as a tool for providing timely, formative feedback is ongoing. Our experience to date suggests that it is feasible even during a relatively short window with a relatively high student to lecturer ratio.