

Developing Paediatric Undergraduate Simulation: A Pilot Study

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Abstract

Context

Simulated exercises are now used widely for education and evaluation in the medical profession (1). There is increasing evidence to suggest that high quality, high fidelity simulation is an effective and desirable teaching method for students. Simulated scenarios are beneficial to both students and patients, as they protect both realism and enhance patient safety (2). Currently, at The University of Glasgow, the focus has been primarily on adult-based scenarios. The aim of our pilot study was to evaluate the experiences of medical students taught on three standardised paediatric scenarios over two afternoons.

Description

We generated three new paediatric scenarios, based on common emergencies: anaphylaxis, bronchiolitis and meningococcal sepsis. All students doing their child health block, during October-November 2016, were invited. Students worked individually or in pairs to complete the exercise. After the scenario, the group was debriefed and micro teaching delivered. The 'Satisfaction with Simulation Experience Scale' was used to gauge the students' experiences (3). Each of the 18 items were scored from 1 'strongly disagree' to 5 'strongly agree' as well as an opportunity to provide additional freehand comments.

Observation

Of the 36 students invited to participate, 11 (31%) responded and agreed to take part. The maximum and minimum scores for each of the 18 items was 5 ('strongly agree') and 4 ('agree') respectively. The median and mode for each of the 18 items was 5. 5 (45%) of the students rated 'strongly agree' for all of the feedback questions. 1 (9%) of the students rated 'agree' for each of the 18 items. 10 (91%) of the students rated 'strongly agree' that it was a 'valuable learning experience' and 9 (82%) rated 'strongly agree' that it 'developed their clinical decision making skills'. 8 (72%) gave free text comments. Comments included: 'very useful' (2), 'great experience' (2), 'really useful' (1), 'enjoyable' (1), 'fantastic session' (1) and 'very good session' (1).

Discussion

It was clear that the students found the scenarios very useful. The lowest rating given for any

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item was 4 ('agree'). Almost half of the students rated 5 ('strongly agree') for every feedback question. The free text comments further highlighted their satisfaction with the sessions. We did identify several challenges. It was apparent that each scenario took one hour to prepare and deliver. Given that we have almost 40 students per block, this would pose a significant resource burden in order to sustain a faculty to train 250 undergraduates per annum. In conclusion, we demonstrated that paediatric simulation is an effective and desirable teaching tool for medical students. It remains to be seen whether there are sufficient resources to allow for these scenarios to be incorporated into the undergraduate curriculum in the near future.

65