

Simulation for Education and Formative Assessment of Anaesthetic Trainees in Neuroanaesthesia

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Introduction

One of the challenges inherent in anaesthetic training is to ensure trainees are competent to provide anaesthesia for both elective and emergency cases at the completion of their training. This requires proficiency in the management of various crises as reflected in the learning objectives of the FANZCA curriculum modules¹. Simulation has been used extensively to expose trainees to crises they may otherwise not encounter during the course of their training. This project sought to develop a series of simulation scenarios to both train and formatively assess trainees completing their neuroanaesthesia module at the John Hunter Hospital.

Methods

Three simulation scenarios were developed to be used at the Hunter New England Skills and Simulation Centre (HNESSC) focussing on the presentation of crises in neuroanaesthesia. Input was obtained during the development of the scenarios from neuroanaesthetists, faculty members from the HNESSC and other anaesthetists. A session was developed which also included a neuroanaesthesia multiple choice paper, self-assessment and feedback questionnaires, a question and answer session with a senior neurosurgery trainee and debriefing sessions for each simulation scenario.

Results

The scenarios were firstly piloted on a neuroanaesthetist and feedback obtained regarding technical and non-technical components of the scenarios. Minor modifications were made as a result of this feedback prior to a pilot session being conducted on two advanced trainees who were nearing completion of the neuroanaesthesia module of the FANZCA training program. All participants performed to an appropriate level, found the exercise helpful and favoured inclusion of the session as a requirement for completion of the neuroanaesthesia module at the John Hunter Hospital. As a result of the pilot, implementation of the session as part of the neuroanaesthesia module is planned for 2010, with minor modifications.

Conclusions

Simulation can be used to provide systematic exposure of trainees to rare crises in neuroanaesthesia thereby increasing their educational experience whilst also fulfilling the criteria of the neuroanaesthesia module of the FANZCA training program. It also provides a means to formatively assess the performance of trainees during crises.

1 Curriculum Modules, ANZCA, accessed online 2010