

Introduction

Simulation in critical care training for general surgeons is well established in the UK. Neurosurgery residents are often involved at the point-of-care for critically ill patients in their own specialised environment. They may be the first ‘port-of-call’ for emergencies, yet many receive little training in exposure to joint neuro-critical care or non technical skills. Our challenge was to deliver a two-day national training course for neurosurgical residents with simulation workshops for acute care of the critically ill. It was held at a UK conference centre with no in-situ simulation facilities. The first such course was organized in 2012 and has been successfully run annually since.

Methods

Using our previous experience of developing a simulation-based induction programme into neuroanaesthesia for anaesthetic trainees we devised workshops to include scenarios commonly encountered on the neuro-critical care unit. Faculty included consultant neurosurgeons, neuroanaesthetists, resuscitation officers and senior neuro-critical care nurses. We aimed to overcome environmental limitations by using a mobile high-fidelity simulator provided by an event sponsor (Sim-Man, Laerdal, Orpington, UK) and ‘mock-ups’ for ventilators and other aspects of the neuro-critical care environment.

Results

Feedback was obtained from all 100 delegates (25 per year). Of these, 100% rated the simulation-based workshops as either ‘Excellent’ or ‘Good’ on a four-point scale. The need for regular ward-based simulation for both local and international residents in their respective training programs was highlighted. Free-text comments provided further positive feedback.

Conclusions

It is possible to use mobile simulation-based training in non-clinical locations to realistically highlight the clinical and non-technical skills necessary to the management of critical incidents in the neuro-critical care working environment.

Learning Objectives

By the conclusion of this session, participants should be able to:

- 1) Describe the importance of simulation in neuro critical care
- 2) Identify local training needs and possible solutions.