Actor Training for Surgical Team Simulations in a Portable Simulation Environment

Eva S Kassab, Dominic King, Louise M Hull, Nick Sevdalis, Sonal Arora, Roger L Kneebone and Debra Nestel

Background

Surgical training provides opportunities for structured learning of the complex set of skills required for safe surgical practice. Simulations enable surgeons to practise these skills without risk to patients. However, recruiting healthcare professionals to recreate a full surgical team is difficult and resource intensive. We trained professional actors to portray members of a surgical team in a portable surgical environment, which recreates a fully-equipped operating theatre (OT) by using portable, low-cost equipment.

Aim: To evaluate a training programme for actors to play roles of surgical team members (anaesthetist, scrub nurse and surgical assistant) in the context of a portable OT simulation environment.

Methods

The iterative one-day-programme comprised written materials, video discussion and experiential activities. Evaluation methods consisted of post-simulation interviews and questionnaires with actors and participating surgeons. Participants were recruited by convenience sampling. Quantitative data were analysed using descriptive statistics and interviews by thematic extraction.

Results

Three actors underwent training for simulations. Six surgeons
completed six simulations. Surgeons’ perceived realism of actors was 4.7 (SD= 1.4; 6-point scale 1=not at all realistic to 6=completely realistic). Feedback, rehearsal and a video of the surgical procedure were highlighted as particularly valuable. Suggestions to improve training include watching real operations and talking to healthcare professionals.

**Conclusions**

After relatively brief training actors can realistically portray members of a surgical team in simulations designed to support surgical training. Although the study has some limitations, its findings have relevance to the growing field of high fidelity, simulation-based surgical team training.