

Simulation training as a tool to improve confidence in managing medical emergencies and leading cardiac arrests for core medical trainees

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Aims

A simulation-based training course was designed with the aim of improving confidence of core medical trainees (CMTs) in managing emergency presentations and cardiac arrest.

Methods

Four 10-minute high-fidelity simulation scenarios were designed to cover management of anaphylaxis, shock, and unconscious patient and cardiac arrest, consistent with the CMT curriculum. Twenty-two candidates were divided between six sessions. Candidates were briefed on key emergency algorithms and debriefed regarding the medical management and leadership skills shown. Surveys using Likert scales were conducted before and after simulation to measure confidence levels in managing deteriorating medical patients and leading cardiac arrest. The scale ranged from 1 to 5 with 1 indicating 'not at all' and 5 'definitely'.

Results

Twenty-two CMTs were surveyed. Anaphylaxis was the emergency situation which most reported the least confidence in managing. All CMTs (100%) reported increased confidence in managing emergency situations following the simulation session (average score 3.45 pre-course vs 4.5 post-course) and 91% felt more comfortable with the ALS algorithms following the session (average score 3.36 pre-course vs 4.5 post-course). Ninety-five percent stated that the course would change the way they manage real-life emergency situations with one participant commenting that 'being able to watch colleagues and learn from others [was most useful]; [you] can pick up on good points to incorporate into practice'.

Conclusion

This study has shown that simulation-based training is effective in improving confidence of CMTs in managing medical emergencies and cardiac arrest situations. In an environment with limited

opportunities for CMTs to take up leadership roles in real-life arrest situations, simulation training is extremely valuable in improving confidence. We propose that all deaneries consider offering simulation training to CMTs to improve confidence in managing emergency and cardiac arrest situations. ■

Conflict of interest statement

The authors have no conflict of interest to declare.

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