40561 - DURABILITY OF NON-TECHNICAL SKILLS AFTER SIMULATION TRAINING

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INTRODUCTION: Non-technical skills, such as task management, team working, situation awareness and decision making, are vital to anesthesia crisis resource management.(1) Attainment of these skills by trainees is often facilitated through the use of a high fidelity patient simulator. Previous studies have demonstrated improvement in non-technical skills following a debriefing of a simulated crisis, and sustained skills two months after the training session.(2) However, demonstrating the retention of these learned crisis management skills is important to validate simulation based education. We conducted this study to examine the durability of learned non-technical skills with respect to time.

METHODS: After institutional ethics approval, 8 junior anesthesia residents were recruited as subjects. Each subject had one individual debriefing of their non-technical skills in the management of a simulated crisis prior to a pre-test. The pre-test was the management of a simulated intraoperative cardiopulmonary arrest, followed by a videotape-assisted debriefing focused on their non-technical skills. Subjects refrained from participating in any simulator sessions for a period of eight months. Eight months after their pre-test, each subject returned to manage a post-test scenario, consisting of the management of a similar intraoperative cardiopulmonary arrest. Videotaped performances were reviewed by two expert blinded independent assessors who rated each subject's non-technical skills, using a previously validated and reliable Anaesthetists' Non-Technical Skills (ANTS) marking system.(1)

RESULTS: A significant improvement was demonstrated in non-technical skills eight months after a simulated crisis resource management training session ($p < 0.001$).

DISCUSSION: There was no attrition of non-technical skills eight months after a simulated crisis management training session. Interestingly, not only were residents' non-technical skills sustained, but they significantly improved. Residents' reflection on their simulated crisis experience and debriefing may have lead to improvement. However, the results of this study must be interpreted with caution as improvement may also be secondary to non-technical skills that were observed or practiced clinically during residency training.

REFERENCES: (1) Br J Anaesth 2003; 90(5): 580-8. (2) Anesth 2005; 103(2): 241-8.