A mixed methods, RCT comparing two methods of debriefing for a serious game designed to teach novice anesthesia residents (CA1) to perform general anesthesia for emergency cesarean delivery

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The use of general anesthesia (GA) for cesarean section (CS) is steadily declining, primarily because of concern for the risk of difficult intubation. Insufficient exposure of anesthesia residents to GA for CS has warranted the creation of effective alternative teaching tools. Serious video games (SG) facilitate immersive learning. We developed a SG (EmergenCSims©) to train novice CA1s the management of GA for CS. We aim to 1) ascertain the optimal debriefing style for SG-mediated instruction, 2) to evaluate EmergenCSims© as an educational tool and assess perceptions of cognitive load among experienced learners vs. novices, and 3) to compare results of performance and perceptions of EmergenCSims© vs. high fidelity simulation of the same scenario. The use of SGs to teach the management of obstetric emergencies may be as effective for learning as traditional techniques, which should ensure safe maternal care for generations to come.