Feasibility of Asynchronous Learning in Collegiate EMS: Impact of a Novel Training Program on Self-Reported Measures of Confidence

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POSTER PRESENTATION ABSTRACT

Introduction: Brown University EMS (BEMS) provides 24/7 emergency medical coverage using one non-transport SUV and one ambulance equipped at the BLS and ALS/BLS levels, respectively. Each vehicle must be attended by an ALS staff or BLS student supervisor per standard operating guidelines. While this dual-supervisor model allowed BEMS to capture 25% more calls in 2016, its maintenance requires a robust staff of qualified student supervisors. Though progression models for becoming a "supervisor" or "crew chief" vary by institution, the loss of experienced personnel following graduation is a ubiquitous challenge. **Program Development & Implementation:** A novel BLS Supervisor Training Program (STP) was implemented during Fall 2017. Using asynchronous learning, we sought to optimize training time by promoting self-learning off-shift and outside of traditional didactic models. Concurrent with 48 hours/month of precepted field training, students participated in 16 weekly sessions, alternating between two hours of small-group, problem-based learning and online modules accessed through our internal website. Online content was developed internally using original exercises and augmented by Free Open Access Medical Education resources, including selected podcasts from EmCrit and Emergency Medicine Cases. **Program Evaluation:** As part of internal QI efforts, questionnaires assessing students' goals and progress were routinely included during STP. Students (N=7) rated their confidence at supervising BLS calls on a 0-10 scale ranging from "Not at all Confident" to "Absolutely Confident" with 100% response rates. Mean [95% CI] scores of 5.4 [3.9, 6.9] and 8.6 [8.0, 9.2] were collected pre- and post-STP, respectively, and there was significant improvement within individual scores (Paired t-test: p=0.004, 95% CI [1.4, 4.9]). **Discussion/Conclusion:** Student training and development within collegiate EMS may be limited by call volume, time-demands, and personnel turnover. We propose asynchronous learning as a feasible method to optimize training time in collegiate EMS through accommodating undergraduates' time constraints. Similar education models may increase operational efficiency, patient safety, and quality care.

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