

communication skills. DASH-SV demonstrated overall effective facilitator debriefing. Greater than 80% of interns in both 2012/2013 suggested that they would desire future educational sessions.

Conclusion: A novel, longitudinal, interdisciplinary critical care simulation curriculum was implemented for all interns caring for adult patients within a tertiary care hospital system. The curriculum was associated with increased learner confidence in select critical care topics, procedures, and communication skills while demonstrating a high level of learner satisfaction.

266 Simulation Conducted In Situ Versus At A Simulation Center: A Pilot Study Of Participant Satisfaction And Costs

Francesco Dojmi Di Delupis¹, Maura Kennedy², Edward A. Ullman², Paolo Pisanelli¹, Giovanni Di Luccio¹, Meaghan E. Cussen², Robert L. Freitas², and Gian Franco Gensini³
¹University of Florence and Careggi University, Florence, Italy; ²Beth Israel Deaconess Medical Center, Boston, MA; ³University of Florence – Don Carlo Gnocchi Foundation, Florence, Italy

Background: Medical simulation is traditionally performed in a technologically advanced simulation center; however, these centers are expensive to build and maintain and may not provide good functional fidelity. Using wireless mannequins, high-fidelity simulation can be

Table 266: Di Delupis. Participant Responses to Post-Simulation Survey

Question	In Situ N=24	Simulation Center N=23	p-value
Participation in this simulation session will improve patient care - n (%) agree or strongly agree	24 (100%)	22 (96%)	0.5
Participation in this simulation session will improve teamwork - n (%) agree or strongly agree	24 (100%)	24 (100%)	1.0
This simulation session accurately recreated the practice environment - n (%) agree or strongly agree	23 (96%)	20 (87%)	0.35
Participation in this simulation session will improve communication - n (%) agree or strongly agree	23 (96%)	23 (100%)	1.0
The debriefing session effectively identified ways to improve health care delivery - n (%) agree or strongly agree	24 (100%)	24 (100%)	1.0
How likely are you to participate in future simulation conducted in the emergency department? - n (%) likely or very likely	24 (100%)	19 (83%)	0.05
How likely are you to participate in future simulation conducted in a simulation center? - n (%) likely or very likely	22 (92%)	19 (83%)	0.4

conducted in situ at a fraction of the cost of building a simulation center.

Objectives: The primary objective of this study is to compare participant assessment of the effectiveness of simulation in situ versus simulation conducted at a stationary simulation center. A secondary objective is to compare the participant costs of simulation in situ with simulation at a stationary center.

Methods: Simulations involved ED physicians, nurses, and health care assistants from three public hospitals within the Region of Tuscany - two community hospitals and one academic university hospital. ED providers were randomized by site to either simulation training in situ at their ED or at a simulation center in Florence. The same scenarios and instructors were used in each environment. After completion of their assigned simulation and debriefing session, participants completed survey questions asked on five-point Likert scales. The proportion of participants in each simulation environment who answered 4 or 5 to each survey question is reported and compared with Fisher's exact test. To calculate participant costs, we surveyed individuals assigned to simulation center training and collected data on costs of transportation, parking, and food, for both the simulation center training and for a standard day at work. Participant costs are reported as means with SD, and compared with a t-test.

Results: A total of 47 individuals participated in the simulation sessions; 23 (49%) had previously participated in medical simulation. There was no significant difference in participant responses to questions regarding the effectiveness of simulation in medical training. Participants randomized to simulation in situ were more likely to want to participate in future in situ training (p=0.05). Mean per-participant costs to travel to the simulation center were significantly greater than the costs for training in situ (€45.79, SD €27.24 versus €4.50, SD €6.14; p<0.001).

Conclusion: Simulation conducted in situ was as effective as simulation conducted in the simulation center, but at significantly less cost to the individual participant.

267 Respiratory Failure from Acute Drug Overdose: Incidence, Complications, and Risk Factors

Angela Hua¹, Stephen Haight², Robert S. Hoffman³, and Alex Manini¹
¹Icahn School of Medicine at Mount Sinai, New York City, NY; ²University at Buffalo Medical School, Buffalo, NY; ³NYU School of Medicine, New York City, NY

Background: Drug overdose is the leading cause of injury-related fatality in the US, and respiratory failure remains a major source of morbidity and mortality. However, neither the incidence nor risk factors for respiratory failure in overdose patients are currently known.

Objectives: To identify the incidence and risk factors for respiratory failure following acute drug overdose.

Methods: Secondary data analysis was performed from a prospective cohort of adult ED patients with acute drug overdose at two urban tertiary-care hospitals over a 5-year period. Excluded were patients with alternate diagnoses, anaphylaxis, chronic drug toxicity, and missing outcome data. ED clinical data included demographics, congestive heart failure (CHF), chronic obstructive pulmonary disease (COPD defined as asthma, chronic bronchitis, or emphysema), drug information/screens, blood gas analysis, indications for endotracheal intubation (ETI), details of ETI (location, drugs, complications), and in-hospital mortality. The study outcome was respiratory failure defined as the requirement for mechanical ventilation. Assuming 4% incidence of respiratory failure, we calculated the need to analyze 2500 patients to show 150% increased risk from common predictors with an 80% power. Univariate analysis (chi-square, t-test), 95% confidence intervals (CI), and multivariable logistic regression were performed with SPSS software.

Results: We analyzed 2,497 patients (mean age 45, 54% male) of whom 87 (3.5%) had respiratory failure requiring ETI. Prehospital ETI