

UC Irvine

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health

Title

Resident Participation in Fresh-Tissue Lab Increases Confidence and Retention of Procedural and Anatomical Knowledge

Permalink

<https://escholarship.org/uc/item/4dr906d9>

Journal

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health, 16(4.1)

ISSN

1936-900X

Authors

Cunningham, T.
Huecker, M.
Harris, Z.

Publication Date

2015

Copyright Information

Copyright 2015 by the author(s). This work is made available under the terms of a Creative Commons Attribution License, available at <https://creativecommons.org/licenses/by/4.0/>

status (graduate, resident, or applicant) and cross-tabulated to evaluate group interest in GH topics, prior GH exposure, and impact of GH training opportunities on program ranking. Frequency and chi square statistics were calculated using Stata v.13.1 (Stata, Inc., College Station, Texas); $\alpha=0.05$ was considered statistically significant.

Results: Of the 180 individuals recruited for study participation, 147 (81.7%) voluntarily completed our questionnaire, including 34 (23.1%) graduates, 37 (25.2%) residents, and 76 (51.7%) applicants. An overwhelming majority (88.5%) expressed interest in GH topics and most (77.5%) reported that didactic GH training would improve the overall EM residency experience. Participants with prior GH exposure and participants that expressed interest in GH were more likely to rank EM residency programs with GH training opportunities higher than programs without GH training opportunities ($\chi^2=27.0, p<0.001$; $\chi^2=12.3, p=0.002$).

Conclusion: Findings support trends indicating growing interest in Global Health among EM physicians. Global Health interest and prior Global Health exposure significantly impact EM residency program ranking.

58 Resident Participation in Fresh-Tissue Lab Increases Confidence and Retention of Procedural and Anatomical Knowledge

Cunningham T, Huecker M, Harris Z / University of Louisville, Louisville, KY

Introduction / Background: Duty hour restrictions and patient safety concerns have altered resident procedural instruction. Simulation models have largely replaced cadaver-based training. Residents receive little formal procedural instruction on realistic human models. The American College of Surgeons has addressed this by offering the ASSET cadaver course. Emergency medicine offers no such standardized curriculum.

Educational Objectives: We implemented a module of procedural instruction in a fresh-tissue cadaver lab. We expected the residents to gain and retain procedural knowledge, translating to improved confidence and operational skills.

Curricular Design: All residents first completed a survey and multiple-choice test. Videos and a PowerPoint presentation were then distributed.

Emergency medicine (EM)1 residents participated in the fresh-tissue lab while the EM2 residents did not. Lab sessions had a 3:1 resident to faculty ratio. Multiple procedures were performed, along with dissection and anatomy review. Lab participants completed a survey on the value of the session.

Three months later, all residents completed the original test. Six months later, all residents completed the original survey.

Impact / Effectiveness: This “innovation” is a return to an established but deemphasized teaching method. Lab participation improved confidence in performing and teaching

procedures. Survey data indicate a preference for the fresh-tissue method compared to simulation. Residents desire more formal instruction in procedures and anatomy.

The initial mean test score in the EM1s was lower than EM2s. Three months later, the mean score of the EM1s was higher than the EM2s, reaching statistical significance. This indicates an improved retention of knowledge due to our educational innovation. Interestingly, residents did not realize our effort to dispel the questioned dogma of “see one, do one, teach one”

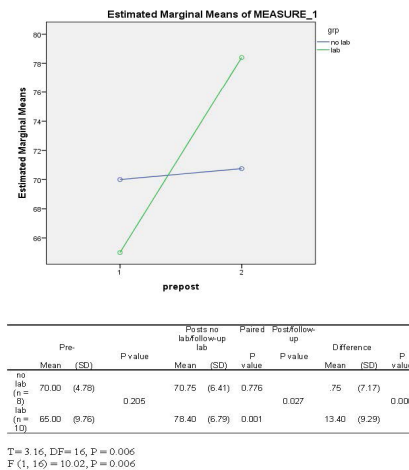


Figure 1.

59 Resident Performance and Charting of Key Elements of the History and Physical Exam

Naples R, Repanshek Z, Fisher J / Temple University, Philadelphia, PA

Background: Emergency Medicine (EM) residents are infrequently directly observed during patient care in the emergency department (ED). Consequently, presentation and charting cannot be easily monitored for accuracy.

Objective: We sought to determine if EM residents obtain appropriate history and physical (H&P) exams and chart accordingly on a common ED complaint.

Methods: Using 5 standardized patients (SPs) trained on an asthma case, EM residents at our 3 year urban academic program were asked to perform an H&P, reassessments and charting using a test version of our electronic medical record. Using real time SP reporting and attending physician observation, data was collected on performance of key elements of the asthma H&P and reconciled with the chart. Key elements were based on establish departmental consensus.

Results: 24 of 36 (67%) of residents participated (postgraduate year-1 (PGY-1) n= 9, PGY2 n=7, PGY3 n=8). One encounter involved 2 residents resulting in 23 total SP encounters. Historical data obtained from SP’s include: asthma exacerbation triggers-13/23 (57%), history of intubation-19/23(83%), current smoking-6/23 (26%), last ED visit-13/23 (57%), recent steroid use-16/23 (70%), current