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#### **Title**

Strong Correlation Between Depression/Stress and Self-Reported Microaggressions in Emergency Medicine Residents

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role in applicant choice. Conversely, we did not find support for the hypothesis that acuity and competitiveness are correlated (fig1). We still see a strong correlation between competitiveness and DR (fig2).

Conclusions: Despite EM leadership repeatedly criticizing the use of DR, they continue to correlate with competitive EM applicants' preferences. This will continue until we provide our applicants compelling data on the clinical environment of programs. We should therefore consider making an objective score, such as the AAAEM methodology and rankings available to applicants.

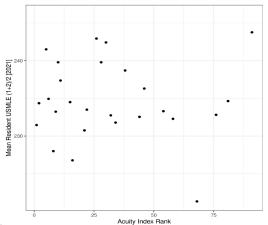


Figure 1.

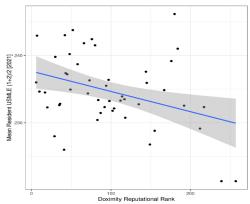


Figure 2.

## 50 Simulation in Emergency Medicine Residency Training Programs: A National Survey

Andrew Bloom, Briana Miller, Jaron Raper, Charles Khoury

**Background:** The use of simulation-based medical education (SBME) has been proven to be an effective instructional strategy both procedurally and clinically.

Emergency Medicine (EM) residency programs utilize SBME in a variety of ways and settings. Simulation (sim) in EM has not been recently evaluated in light of the expansion of residency programs and fellowships. The current state of SBME utilization in EM is unknown.

**Objectives:** To assess the current state and utilization of sim in ACGME-approved EM residencies given the growth of the field of sim and expansion of EM training.

**Methods:** This was a national survey study performed from July through September 2022. The survey was sent to the residency program directors of all 277 ACGME-accredited EM residency programs in the United States. A literature search identified existing publications discussing the state of SBME in EM. From this, a 17-question survey was developed and focused on technology, types of sim (procedural vs. case-based), barriers to growth, and overall sentiments of sim in EM.

Results: Of the 277 EM programs at the time of this abstract, 244 programs were successfully contacted, with a total of responses. Nearly all programs reported access to a dedicated sim center (98%), with available high-fidelity mannequin simulators (94%) and task trainers (91%). Most programs engage in sim didactics monthly (54%), followed by more than monthly (24%) and quarterly (21%). Few programs reported barriers in sim implementation (15%). Of those, funding (35%), sim lab availability (24%), and equipment (21%) were identified most frequently. Programs frequently used sim (82%) to perform the majority of rare but required procedures. Finally, half (50%) of the programs have simulation fellowship-trained faculty on staff.

**Conclusions:** SBME is an important aspect of EM residency and training. A majority of residency programs report dedication and resources to developing and integrating sim into their curriculum.

# 51 Strong Correlation Between Depression/ Stress and Self-Reported Microaggressions in Emergency Medicine Residents

Brian Walsh, Claire Delong, Frederick Fiesseler, Nicole Riley, Marc Wheaton

**Background:** Residents' well-being and their perceptions of microaggression may be correlated.

**Objective:** We sought to measure resident wellness objectively and determine if it is correlated with a resident's perception of how frequently they are victimized by microaggressions.

**Methods:** All the residents at a three-year EM program were surveyed using an anonymous questionnaire in Google Forms. Resident wellness was assessed using the Depression, Anxiety and Stress Scale (DASS), a validated psychometric scale that is used across multiple industries. Using a 5-point Likert scale, residents were also asked how often they feel like

they are the victim of microaggressions: 1: never or almost never to 5: very frequently. The term "microaggressions" was not defined, allowing residents to determine what they feel it to be. Pearson product moment correlation between the two variables was calculated and statistical significance to p<0.05 was determined.

**Results:** 20 out of 27 residents responded to the questionnaire. Seven residents scored for at least mild depression (three severe), nine residents scored for at least mild anxiety (five severe), and 11 residents scored for at least mild stress (one severe). The average rating on the frequency of being the victim of microaggressions was 2.2 (95%CI: 1.6, 2.7), suggesting residents infrequently felt victimized by microaggressions. The Pearson correlation between Depression and the frequency of microaggressions is r=0.56 (p=0.01), between Anxiety and microaggressions is r=0.41 (p=0.07, NS), and between Stress and microaggressions is r=0.63 (p=0.004)

Conclusion: This study suggests there is a correlation between depression/stress and a residents' perception of being victimized by microaggressions. It is unclear whether being the victim of microaggression leads to more depression/stress or if residents with more depression/stress view comments as being more insulting. Certainly, this subject merits further study.

### Take-Home Naloxone in the Emergency Department: Assessing Residents' Attitudes and Practices

Aaron Dora-Laskey, Brittany Ladson, Brett Gerstner

**Background:** Take-home naloxone may mitigate opioid overdose risk in emergency department (ED) patients who use drugs, yet little is known about emergency medicine (EM) resident dispensing practices.

**Objective:** To identify factors associated with resident take-home naloxone dispensing.

**Methods:** We analyzed ED take-home naloxone kit data retrospectively from a single Michigan community ED (100k/yr) convenience sample between 3/11/2020 and 10/30/2021, comparing dispensing rates to resident shift type (morning, midday, night) and training year (PGY-1 to 3) using the Kruskal Wallis test. Current residents' attitudes regarding naloxone were assessed using a validated tool, the Naloxone-Related Risk Compensation Belief survey.

**Results:** Of 274 kits, 76 could be linked with one of 2,409 resident shifts, yielding a dispensing rate of 3.15 kits/100 shifts. Of 34 residents scheduled, 12 (35.3%) ordered no kits, 7 (20.6%) ordered 1 kit, and 15 (44.1%) ordered  $\geq$  2 kits. Dispensing rates were highest among PGY-3 (4.35 kits/100 shifts) compared to PGY-2 (2.20) and PGY-1 (1.06) residents (p=0.006). Kit dispensing was more frequent during night (3.82 kits/100 shifts) compared to midday (3.23) and day

(2.20) shifts; this was not statistically significant (p=0.09). Of 25 EM residents surveyed, 21 responded (84%). Fewer than 10% believed dispensing naloxone to people who used opioids would result in greater drug use or decreased treatment-seeking, and only 1 resident agreed that there should be a limit to the number of times a person receives naloxone. None reported that naloxone was enabling for people who used drugs, or that dispensing naloxone sends the message that residents condone risky opioid use.

**Conclusions:** EM resident take-home naloxone dispensing was associated with more senior year of training, suggesting a need to better educate junior residents. Few residents expressed concern that naloxone would increase risky drug use or decrease treatment-seeking.

#### Targeted Procedure Lab to Improve Self-Identified Deficiencies Among Graduating Emergency Medicine Residents

Andrew Bobbett, Stephanie Cohen, Andrew Bobbett, Jeffrey Thompson, Robert Pell, Latha Ganti

**Background:** Simulation is the artificial recreation of an experience for the purpose of education. This study focuses on the usefulness of targeted procedural labs in correcting self-identified deficiencies and increasing procedural confidence in emergency medicine (EM) resident procedural skills.

**Objectives:** To determine whether a procedure lab targeting procedures that EM residents do not feel proficient in can increase feelings of confidence prior to residency graduation.

Methods: A survey was performed comparing EM residents that participated in a targeted procedure lab versus residents that did not. The sample included 31 EM residents delineated by program year at onset of study— Group A: Class of 2021 (15 residents, year 2), Group B: Class of 2020 (16 residents, year 3). In June 2020, groups A and B filled out a survey indicating procedural confidence. A procedure lab was made based on the top 12 procedures group A felt they needed practice in. Group A participated in the procedure lab in March 2021. Group B did not receive the targeted treatment lab. Group A completed the post intervention survey in May 2021.

**Results:** Group A self-reported a decreased need for more procedural support training and increased confidence in procedural skills compared to Group B in nine out of twelve procedures. Results from an inference for two proportions indicate a statistically significant difference between the percent of Group A compared to Group B participants wanting more experience performing Subclavian Line (TS = -2.102, p < .05; 95%CI (-0.68, -0.02) and Thoracotomy (TS = -2.01, p < .05; 95%CI (-0.603, -0.007) procedures, indicating Group A reported significantly increased confidence in the Subclavian Line and Thoracotomy procedures.