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5 Know Your Pressor: Table-Top Simulation for Push "micro" Dose Pressor Preparation and Use

Andrew Bloom, Jaron Raper, Helena Kons, Emily Green

Introduction: The practice of preparing and administering small doses (micro or push) of vasopressors in hemodynamically unstable patients is an essential skill in Emergency Medicine (EM). Using micro dose pressors (MDP) can be lifesaving but is also a high-risk practice with opportunities for errors in calculation, preparation or administration. Simulation provides a low-stake forum for learners to practice and fine-tune skills. There exists little to no formal education of MDP administration and preparation. Here we collaborated with our pharmacists to develop a table-top based MDP simulation for our EM residents.

Educational Objectives:

1) Explain indications for MDP in the ED
2) List appropriate supplies to prepare MDP
3) Determine appropriate MDP, dose, and frequency of administration based on clinical scenario
4) Prepare MDPs and propose appropriate dose to a patient

Curricular Design: The curriculum was designed by EM Clinical Pharmacists with EM faculty support. Pre-learning slides were provided to learners prior to the simulation highlighting MDP use and preparation. Learners participated in a 20-minute table-top simulation with our Pharmacy team with pre-brief and debriefing sessions. During the simulation MDPs were prepared, indications were discussed, and appropriate dosing and frequency was highlighted. Learners completed pre and post surveys using a 10-point Likert scale outlining comfort and knowledge of MDPs.

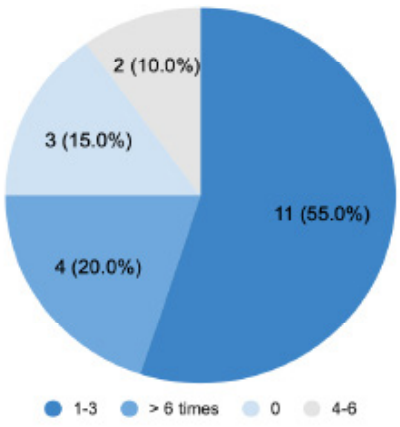

Figure 1. Prior learner experience with Micro-dose Epi.

Impact/Effectiveness: 20 EM residents participated in the simulation. A majority (65%) of residents had not prepared MDPs in a clinical setting highlighting the need for ongoing training. After the simulation residents reported significant improvement in performing (4.63 vs. 8.74), dosing (5.42 vs 9.0) and teaching (4.11 vs 9.0) MDP administration and preparation. Overall residents felt the activity was worthwhile (9.9) with high satisfaction (9.95).

6 Utilizing Simulation to Integrate Social Determinants of Health into Emergency Medicine Medical Student Clerkships

Andrew Bloom, Joshua Waldeck, Erin Shufflebarger, Zach Pacheco, Katherine Griesmer, Briana Miller

Background: Medical education has increasingly focused on the social aspects of healthcare in recent years, with programs incorporating training on the social determinants of health (SDH). Despite this progress, a gap remains in standardized simulation scenarios with SDH training objectives, and efficacy data is limited. This study introduced a series of emergency medicine (EM) training scenarios that integrated both clinical and SDH objectives. These scenarios aimed to provide learners opportunities to diagnose and manage common urgent and emergent complaints while also considering social factors.

Objectives: To incorporate SDH into medical student curriculum using simulation-based education.

Methods: A medical student and EM faculty developed simulation scenarios for use during a required third-year medical clerkship. The scenarios incorporated realistic SDH themes into common EM presentations, followed by debriefing. Pre- and post-intervention surveys were administered to participants.

Results: 30 students participated in the simulation and completed pre- and post-surveys. Post-survey results showed improved comfort in identifying (62% to 78%) and addressing (48% to 74%) patients' social needs. Confidence in awareness of SDH resources also increased (44% to 67%), and participants felt more confident connecting patients with these resources (44% to 75%). Learners also reported greater consideration of SDH in patient care post-training (68% to 87%). Participants overwhelmingly found the training valuable (96%). A slight increase was noted in the belief that medical students should be trained to address social needs (90% to 95%), reinforcing a pre-existing interest in SDH training. Overall, the scenarios were considered meaningful and broadened the students' perspectives on patient care.

Conclusion: This series of EM simulation scenarios demonstrates the feasibility, effectiveness, and perceived value of integrating SDH training into EM education.

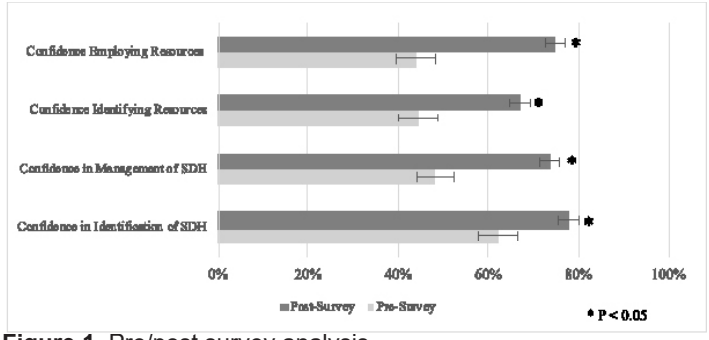

Figure 1. Pre/post survey analysis.

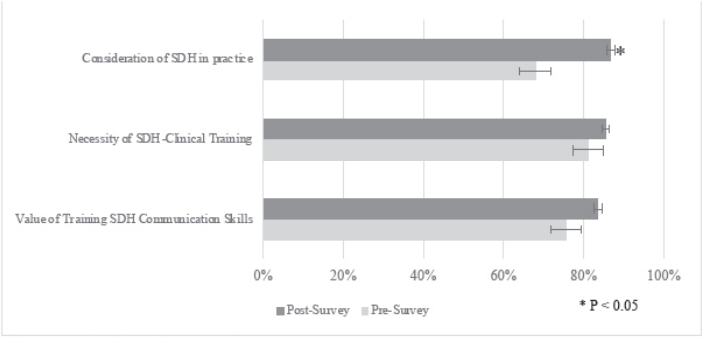

Figure 2. Pre/post survey analysis.

7 Navigating the Emotional Transition to and through Intern Year

Kathryn Lorenz, Linda Regan

Introduction: The AMA has indicated the importance of intern mastery of 8 domains of well-being including emotional. The transition from medical school to residency is overwhelming medically and emotionally given the expectations for new residents and patient care demands. Emotional readiness refers to the foundational emotional skills that help a resident flourish during intern year including learning to fail, understanding your strengths, and taking care of your own well-being. At our institution, 72% of residents indicated that they entered residency in the pre-contemplation stage for emotional readiness, acknowledging the importance of emotional readiness but not having strategies to grow in this domain. A curriculum that addresses the emotional transition to residency can be an effective tool to support emotional well-being for new residents.

Educational Objective: Our curriculum was designed to create an environment that normalizes the wide array of emotions that intern year invokes, fosters support, and provides resources for navigating those challenges.

Curricular Design: This curriculum consisted of four sessions during the academic year focused on developing a transparent and supportive community when discussing emotions that arise throughout the PGY-1 year. Key concepts included expectation setting as a new intern, peer to peer debriefing strategies, normalization of failure, and the importance of reflective practice.

Impact/Effectiveness: The curriculum was implemented in 2023-2024 with 12 PGY-1 residents. Participant feedback has been overwhelmingly positive, commenting on the transformational nature of this curriculum on their mindset for intern year. Objectively, participants demonstrated growth in emotional readiness, with 75% of respondents moving past the pre-contemplation stage and into the preparation and action phases of honing skills necessary for emotional success in residency. This small pilot demonstrates great promise for impacting emotional wellness during transition.

8 An Addiction Medicine Program for Emergency Medicine Residents

Ashley Iannantone, Andrea Carlson, Ryan McKillip

Introduction: For over a decade, discourse in the graduate medical education realm has identified a need to integrate addiction medicine into training, particularly for primary care and EM specialties. Despite this call to action and the prevalence of patients presenting to the ED for concerns related to substance use, there remains a gap in formal education on the topic during EM residency. Few programs offer formalized addiction medicine curriculums or elective opportunities, forcing residents to seek out FOAMed resources independently.

Educational Objectives: Our aim was to design a didactic-based comprehensive addiction medicine program for EM residents at all levels of training. Upon completion of this program, residents should be more comfortable with diagnosing and managing substance use disorders and their sequelae.

Curricular Design: We developed a didactic-based program covering the following addiction medicine topics: 1) screening for and diagnosing substance use disorders, 2) medication-assisted treatment for alcohol use disorder and opioid use disorder (including buprenorphine induction in the emergency department), 3) emerging drugs of abuse, and 4) motivational interviewing. Didactics were 30-60 minutes in length and were given throughout the 2024-2025 academic year during the regularly scheduled weekly resident conference. Feedback was solicited from resident and attending physicians after each session. Residents also have the option to do an Addiction Medicine elective, rotating with both our inpatient addiction consult service and in the outpatient medication assisted treatment clinic.

Impact/Effectiveness: Our addiction medicine program has had positive feedback thus far from both residents and