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SleepBuds™ Improve Reported Sleep and Decrease Tension in Health Care Shift Workers: A Prospective, Single-Subject Design Study

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narrowed the total to 1,159 resources. Full-text review of 867 of these resources identified 486 that met our inclusion criteria and underwent evaluation with the rMETRIQ tool. Topic distribution was uneven (Figure 1). Table 1 outlines the subtopic distribution of total posts and high-quality posts with rMETRIQ scores ≥ 16 .

Conclusions: We systematically identified, described, and curated FOAM resources for EM residents and medical students on the topic of endocrinology, metabolic and nutritional disorders. A final list of high-quality resources can guide trainees, educator recommendations, and FOAM authors.

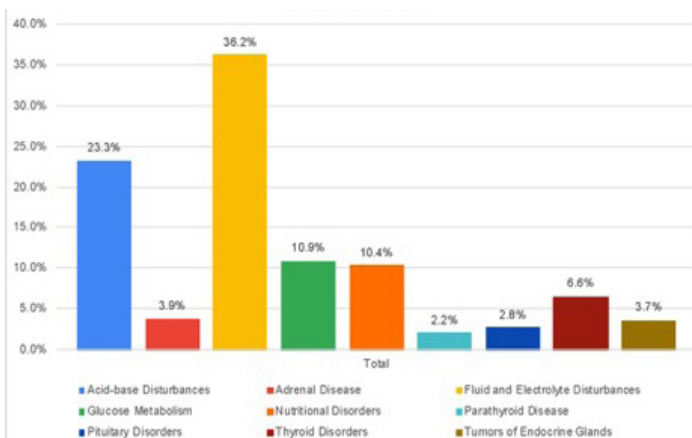


Figure 1. Topic distribution.

Table 1.

Subtopic	Total Posts	High-Quality Posts rMETRIQ ≥ 16
Acid-base Disturbances	181	*
Parathyroid Disease	110	7
Potassium	73	12
Fluid and Electrolyte Disturbances	59	*
Sodium	41	5
Thyroid Disorders	40	*
Nutritional Disorders	34	2
Vitamin deficiencies	28	1
Hypoglycemia	27	1
Hypovolemia	24	3
Diabetic Ketoacidosis	20	6
Pituitary Disorders	16	3
Tumors of Endocrine Glands	15	1*
Corticoadrenal insufficiency	14	1
Thiamine	14	5
Calcium	13	0
Magnesium	11	2
Chloride and Phosphorous	10	0
Hyperosmolar Hyperglycemic State	8	3
Hyperglycemia	6	0
Hyperthyroid	5	1
Hypothyroid	5	1
Malnutrition	5	0
Pituitary	4	3
Adrenal Disorders	4	1
DM Type 2	3	6
Fluid overload	3	0
Cushing's Syndrome	2	2
Malabsorption	1	0
Glucose Metabolism	1	*
Insulin pump	1	1
Total	778	81

*Number of posts pending secondary review and rMETRIQ scoring by topic: Acid-Base Disturbances (180), Fluid and Electrolytes (59), Glucose Metabolism (1), Thyroid Disorders (39), Tumors of Endocrine Glands (13)

57 The Effect of Simulated Patient Death on Participants' Self-Confidence

Devonne Harris, BA; Hilary Fairbrother, MD, MPH

Learning Objectives: The learning objectives include determining how a case with and without simulated patient death impacts participants' confidence and, secondarily, how the order of these simulation cases affect participants' confidence.

INTRODUCTION: The psychosocial effects of high-fidelity simulation are often neglected in studies. To the best of our knowledge, few studies have investigated if participants' self-confidence is significantly altered by simulated patient mortality.

OBJECTIVES: The aim of this project is to determine if participants' self-confidence in high fidelity simulation cases is affected by simulated patient death. It is also important for us to determine if the order of simulated patient outcomes may alter the participants' self-confidence.

METHODS: This is a prospective observational study including medical students participating in a third-year emergency medicine elective at a large academic institution. Students were randomly divided into two groups and each group completed the same two simulation cases. Group A completed a case with simulated patient death (case 1) first followed by a case in which the patient does not die (case 2). Group B completed the cases in the reverse order. After each case, students completed an anonymous survey of their self-confidence based on a validated confidence scale.

RESULTS: There were 15 participants in this study. The self-confidence scale (C-scale) could range from 5 (low self-confidence) to 25 (high self-confidence). The mean C-scale for case 1 and case 2 were 14.4 and 15.3, respectively ($p>0.05$). The mean C-scale for group A ($n=9$) and group B ($n=6$) were 12.9 and 17.7, respectively ($p<0.05$).

CONCLUSIONS: There was no statistical difference between the C-scales reported in case 1 and 2 which suggests that simulated patient death does not directly impact a learner's self-confidence. However, a relationship between the order of the cases and self-confidence appears to exist. Learners who first completed the case without death were overall more confident than their counterparts who first completed the case with death.

58 The Feasibility of the Vot-ER Voter Registration Model in a Public Hospital Emergency Department

Jennifer Lee, MD; Larissa Unruh, MD; Ameera Haamid, MD; Ashlea Winfield, MD; Errick Christian, MA; Rashid Kysia, MD, MPH; Pilar Guerrero, MD

Learning Objectives: The learning objective is to understand the implementation and feasibility of a novel (and

popular) voter registration platform in a busy public hospital emergency department serving underrepresented patients.

Background: Historically, there have been low levels of voter registration amongst impoverished and minority citizens. Due to societal constructs, these patients are overrepresented in public hospitals. In the 2016 Presidential election, only 62.4% of Illinois eligible voters were registered despite policy having a direct impact on healthcare.

Objectives: To evaluate the feasibility of a voter registration system in a public hospital emergency department (ED).

Methods: A prospective observational description of the implementation and feasibility of voter registration using the *Vot-ER* platform was done in a large, municipal urban ED. *Vot-ER* is a national nonpartisan initiative developed for ED voter registration². We implemented it from August to October 2020. A proposal was approved by hospital administration and respective stakeholders after an extensive legal review that took 7 weeks due to institutional ordinances at the hospital. A training module was presented at residency conference and distributed to all ED providers. Registration posters from *Vot-ER* were posted in the ED. We distributed electronic QR codes printed on badges for clinicians. Patients were offered voter registration by clinicians in English and Spanish via *Vot-ER* who tallied online registration.

Results: Voter registration was initiated by 51 patients. Patients without cell phone data access to register on site were given a website link.

Discussion: This platform provided an easy and quick way to register patients at a public hospital. Considering the limited resources required, brief training, and number of patients who initiated registration we feel that a public hospital ED is a feasible location to connect underrepresented patients to voter registration. Given the impact of policy on healthcare, providing underrepresented patients an opportunity to register should be a social emergency medicine priority.

59 The Impact of Sleep on In-Training Examination Scores among Emergency Medicine Residents

Kristin Weeks, MD; Michael Takacs, MD, MPH; Christian DeFazio, MD; Joelle Borhart, MD

Learning Objectives: understand the impact hours of sleep the night before the In-Training Examination (ITE) has on examination scores and consider possible interventions to resident work schedules leading up to the ITE

Background: Sleep deprivation is a fundamental challenge of shift work and has been shown to impact emergency medicine physician-residents' performance and coordination. It is not known if sleep deprivation impacts performance on the in-training emergency medicine examination (ITE). We

hypothesize that more sleep the night prior to the examination is associated with higher examination scores.

Methods: We administered a cross-sectional 12-question electronic survey to physician-residents in emergency medicine residency programs in the United States in April 2020. Our sampling frame was residents of program directors (N=366) receiving the Council of Residency Directors in Emergency Medicine (CORD) listserv. We constructed a multivariable logistic regression model of scoring at least 70% on the ITE by hours of quality sleep the night before the examination.

Results: 286 (90%) respondents who completed the survey reported hours of sleep and were included in the analysis. Independently of sex, year in residency, rotation and hours off clinical duties before the examination, each additional hour of sleep (range <1 to 9 hours) received the night prior to the ITE was associated with 1.25 greater odds (95% confidence interval (CI) 1.01-1.55) of scoring greater than 70% on the examination. The adjusted odds of scoring greater than 70% on the ITE were 7.22 times (95% CI 2.85-18.27) greater for third- and fourth-year residents (versus first and second) and 3.26 times greater (95% CI 1.02-10.43) for residents who had been off-service for 19-24 hours prior to the examination (versus 0-6).

Conclusion: Increased hours of sleep were significantly associated with higher ITE scores. Attention should be given to shift work prior to the ITE, and physician-residents should be given time-off clinical duties the night prior to the ITE to allow for greater hours of sleep. Residents should be educated about fatigue mitigation and the importance of maximizing sleep off-duty.

60 The Landscape of Pediatric Training in Emergency Medicine Residencies

Jillian Nickerson, MD, MS; Aditi Ghatak-Roy, MD; Katie Donnelly, MD, MPH; Xian Zhao, MD, MEd

Learning Objectives: 1) To describe the landscape of pediatric training in EM residencies; and 2) to evaluate the confidence Program Directors (PDs) have in their graduating trainees' ability to care for pediatric patients.

Background: Several studies have demonstrated that Emergency Medicine (EM) providers are uncomfortable caring for pediatric patients relative to caring for adult patients. Pediatric training in EM residents has not been evaluated since 2000.

Objectives: 1) To describe the landscape of pediatric training in EM residencies; and 2) to evaluate the confidence Program Directors (PDs) have in their graduating trainees' ability to care for pediatric patients.

Methods: We conducted a survey study of EM PDs. PDs were identified from the American Medical Association