

UC Irvine

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

Title

Which Wellness Activities Correlate with Lower Resident Physician Burnout?

Permalink

<https://escholarship.org/uc/item/51v2d3h8>

Journal

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health, 20(5.1)

ISSN

1936-900X

Authors

Norvell, JG
Behraves, B
Nazir, N
et al.

Publication Date

2019

Copyright Information

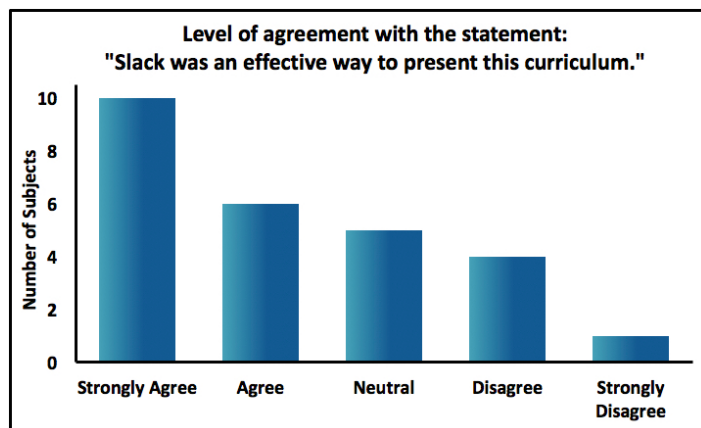
Copyright 2019 by the author(s). This work is made available under the terms of a Creative Commons Attribution License, available at <https://creativecommons.org/licenses/by/4.0/>

pre-survey assessing comfort with several aspects of EM. The curriculum was implemented between Match Day and the first day of internship in 2018. Interns completed a post-survey that re-assessed comfort and elicited feedback on the curriculum.

Results: All 36 interns completed the pre-survey and 26 completed the post-survey (Table 1). Participants reported a statistically significant increase in comfort with identifying airway anatomy and physiology ($p = 0.01$). Mean comfort increased, but was statistically significant for all other objectives. Sixteen of 26 post-survey participants agreed that Slack was an effective way to present the curriculum, and only five disagreed (Figure 1).

Conclusion: When presented prior to the start of residency, the curriculum significantly increased self-reported intern comfort with one EM learning objective. A majority of interns felt that Slack was an effective way to present the curriculum. Limitations included small sample size, possibly hindering detection of statistically significant changes. Interns who found the curriculum less useful may have been less likely to complete the post-survey. This study was not designed to measure improvements in clinical knowledge. Future directions will address these issues.

Assessed Aspect of Emergency Medicine	Pre-Slack Mean	Post-Slack Mean	Difference	Standard Error	T-Value	95% CI	P-Value
Determining Necessity of Diagnostic Studies	3.56	3.85	0.29	0.20	1.45	3.43–4.26	0.16
Interpreting Radiographs	3.39	3.39	0.00	0.23	-0.18	2.91–3.86	0.99
Interpreting Ultrasounds	2.81	3.15	0.35	0.26	1.33	2.61–3.70	0.20
Interpreting CT Images of Head	3.06	3.35	0.29	0.27	1.08	2.79–3.90	0.29
Constructing a Differential Diagnosis	3.92	4.04	0.12	0.15	0.84	3.74–4.34	0.41
Identifying Airway Anatomy and Physiology	2.86	3.65	0.79	0.27	2.99	3.11–4.20	0.01
Describing Basic Biostatistic Principles	2.75	3.08	0.33	0.30	1.09	2.46–3.70	0.29



12 Which Wellness Activities Correlate with Lower Resident Physician Burnout?

Norvell JG, Behravesh B, Nazir N, Milner A, Unruh G. / University of Kansas Medical Center, Kansas City, KS.

Objective: Studies show a high burnout level among resident physicians. Many different activities have been recommended to improve burnout. Researchers also describe

the importance of culture and work efficiency in employee wellness. This study aimed to evaluate the correlation between resident burnout and various wellness activities.

Design and Methods: Each year, the University of Kansas Medical Center Graduate Medical Education Wellness Subcommittee administers a wellness survey to all 560 residents and fellows. The 71-question, electronic survey, which was originally developed at Stanford University Medical Center, received institutional review board approval.

Results: Of the 560 residents who received the survey 393 (70% response rate) completed it, including 147 female residents (37%) and 246 males (63%). The overall resident burnout rate was 20.4%. Sixteen emergency medicine residents completed the survey with a reported burnout rate of 37.5%. Several activities and program attributes correlated with statistically lower resident burnout. Survey results indicated the following: 258 of 383 residents regularly engaged in hobbies outside of work (burnout 15.5% vs 31.2%, chi square p value = 0.0004); 294 out of 381 regularly scheduled protected time with partner/family/friends (burnout 17.4% vs 32.2%, p value = 0.0027); 329 of 379 felt their residency programs had a supportive culture with respect to wellness (burnout rate of 15.2% vs 54%, p -value = <0.0001); and 232 of 388 responded that it was "very true" or "completely true" that their residency programs engaged in initiatives aimed at improving the efficiency of their healthcare delivery (burnout rate of 11.2% vs 40.0%, p -value = <0.0001). Residents who regularly engaged in physical activity more often than once per week trended toward lower burnout (burnout rate of 17.7% vs 32.8%, p value = 0.14). Practicing meditation/mindfulness or considering oneself to be a spiritual person did not correlate with lower burnout in our survey.

Conclusion: Our study demonstrates evidence of several factors that may be protective against resident physician burnout. These findings are important for emergency physicians, who typically suffer from higher burnout than other specialties. Leaders of academic emergency departments should ensure that they foster a supportive culture, undertake initiatives to improve efficiency, and empower their resident physicians to protect time outside of work and engage in activities that increase wellness.

13 Impact of Endotracheal Tube Twisting on the Diagnostic Accuracy of Ultrasound for Intubation Confirmation

Burns KM¹, D Holladay², Chottiner M³, Gore SR², Shah S², Gottlieb M² / ¹Department of Emergency Medicine, Advocate Christ Medical Center, Oak Lawn, IL; ²Department of Emergency Medicine, Rush University Medical Center, Chicago, IL; ³Department of Emergency Medicine, University of Chicago, Chicago, IL