



## Exploring Gender Bias in Nursing Evaluations of Emergency Medicine Residents

Brucker K, Whitaker N, Morgan ZS, et al. *Acad Emerg Med*. 2019;26(11):1266-1272. PMID: 31373086

360-degree evaluations are an effective form of feedback for residents. Nursing feedback is valuable due to their prolonged, close observation of resident/patient interactions. Gender bias in medicine and evaluations has been documented, but less so in multi-disciplinary evaluations. This interesting article looked for the existence of gender bias in nursing evaluations for EM residents. The authors hypothesized female residents would be rated lower than male peers on interpersonal/communication skills. Three years of biannual nursing evaluations were reviewed; about 30% contained comments. Qualitative comments from nursing evaluations were broken down into four categories that were based on prior research: standout (comments with positive or negative distinction from peers), grindstone (work ethic, efficiency), ability, and interpersonal. Comments were then also further categorized into positive, negative, or neutral. Names and/or pronouns were edited so reviewers were blinded to the gender of the resident being evaluated, though they there were not blinded to the study hypothesis. Once qualitative coding was done, quantitative analysis was also completed.

The authors found significantly lower ratings among female residents in two categories, grindstone and ability. 51% of ability comments about female residents were negative compared to 20% of those for male residents ( $p < 0.01$ ). 57% of grindstone comments about female residents were negative vs 24% of those about male residents ( $p < 0.01$ ). Comments were most common in the categories of interpersonal, followed by ability, then relatively rare in the areas of grindstone and standout. Of note, to control for possible differences in ability, ITE scores and milestone ratings in pertinent areas were compared and were similar for male and female cohorts. Interestingly, communication skills (continued next page)

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were generally rated positively among both male and female residents with no significant differences noted in the evaluations. There were limitations noted by the authors. The study was done at one residency program so results are not necessarily generalizable. Also, the gender of the nurse doing the evaluation was unknown. The authors also note that the reviewers' knowledge of the hypothesis could have led to finding bias. Despite these limitations, this study again demonstrates that bias against female physicians is an ongoing concern. It would be interesting to replicate this study at different types of programs (other specialties and geographic locations) and to examine the relationship between nursing gender and evaluations.

-(Amy Stubbs, MD)

These authors define characteristics of exceptionally professional behavior at their institution. Those looking to evaluate professionalism may want to develop questions assessing these characteristics in addition to questions ensuring minimum performance in other areas. This work adds to our understanding of the top end of performance in professionalism, giving us more insight into this important, but less concrete, competency domain.

-(Aaron Danielson, MD, MAS)



### Does Empathy Decline in the Clinical Phase of Medical Education? A Nationwide, Multi-Institutional, Cross-Sectional Study of Students at DO-Granting Medical Schools

Hojat M, Shannon SC, DeSantis J, Speicher MR, Bragan L, Calabrese LH. *Acad Med.* 2020;95(6):911-918. PMID: 31977341

Empathy has been associated with improved patient outcomes, reduced burnout and higher clinical competence. Current evidence suggests that empathy declines over the course of medical school, though most studies have been single-center and conducted in MD students. Differences in osteopathic (DO) philosophy may potentially lead to different results. In this study, the authors' objective was to do a large-scale examination of changes in empathy over time for DO students and to compare to MD students. They used the validated Jefferson Scale of Empathy to measure empathy and the Zuckerman-Kuhlman Personality Questionnaire to control for respondents' attempts to create "good impressions" that may cause deviation. The study was conducted at the end of the 2017-18 academic year in 41 of 48 DO school campuses. 10,751 (42% of all) students were surveyed. The JSE score declined from preclinical to clinical years: While this result was statistically significant, the effect size (0.13) was considered negligible. As a comparison, women had higher empathy scores than men (effect size "moderate," 0.40 - 0.47) - this difference has been shown in multiple other studies. Students interested



### Towards a Definition of Distinction in Professionalism

Ali A, Anakin M, Tweed MJ, Wilkinson TJ. *Teach Learn Med.* 2020;32(2):126-138. PMID: 31884828

How are we to decide if someone is exceptionally professional? We can point to many specific examples of unprofessional behavior, but as the authors point out "The language used to describe unprofessional behaviors suggests that professionalism is the absence of unprofessional behaviors. Distinction, however, is not usually defined as avoiding inadequacy." Our limited understanding of positive professionalism attributes makes it hard to coach learners to improve professionalism behaviors. Using a qualitative approach, they attempt to define characteristics of distinction in professionalism. The subjects were medical students at the Otago Medical School in New Zealand. The authors analyzed data from three sources: student professionalism evaluations, interviews with faculty course directors, and the institutional code of conduct which was previously developed to outline standards of behavior. In the end, they derived three characteristics defining distinction in professionalism: improving oneself, helping others learn and teamwork. Their next steps are to develop evaluation tools for these characteristics.

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in “people-oriented specialties” scored higher than those in “technology/procedure oriented specialties” (effect size “moderate,” 0.30 - 0.38; also previously demonstrated). When comparing DO students to MD students (using data from a previous, unrelated single-center study), the only statistically significant difference was in M3 (effect size 0.19). The strengths of this study were the large representative sample and use of a validated score. Comparisons to MD students are less convincing as the sample was limited and the data was collected differently. The study was not longitudinal, i.e. it did not study the same student over time. Overall, the results align with other data that show small declines in empathy over time. Similar declines have been observed in residency training as well as in lawyers and other professions. The lack of finding substantial difference between DO and MD students is therefore not surprising. But the results give me pause; what are we doing wrong? As our students and residents increasingly interact with people having the worst days of their lives, why do we not learn to empathize with them? Now more than ever, the world needs us to reverse this decline. The COVID-19 pandemic has highlighted how the public empathizes with us; we must respond in kind.

-(Nikhil Goyal, MD)



## An Asynchronous Curriculum for Teaching Practical Interpretation Skills of Clinical Images to Residents in Emergency Medicine

Messman AM, Malik A, Ehrman R. *J Emerg Med.* 2020;58(2):299-304. PMID: 32220547

Social media and online education have become ubiquitous in medicine and resident education. Emergency medicine and critical care medicine have been at the forefront of FOAM, and our learners utilize FOAM resources to enhance their education. While there is debate about the overall value and validity of social media in education, its presence

is only increasing. The authors looked to fill a potential gap in resident education, a lack of a formal diagnostic imaging interpretation curriculum, via an asynchronous social media-based curriculum. This study looks at how to utilize a common social media platform, Slack, to improve resident comfort and confidence with the interpretation of diagnostic imaging at a single EM residency.

The curriculum was developed by two senior EM residents with faculty guidance. The curriculum consisted of case vignettes and accompanying images. The cases and images encompassed either a common or high-risk ED diagnosis. The cases were presented weekly via a dedicated channel on Slack with open-ended questions. Residents discussed with faculty moderating and promoting conversation. In order to improve resident engagement with the Slack channel, a 5 dollar coffee gift card was given to residents for correct answers and discussion of the case. The residents were surveyed both pre and post-intervention on their comfort interpreting radiological images via a 5 point Likert scale. The residents were also surveyed about their utilization and their perceived usefulness of the Slack channel. Of the 36 residents at the institution, 31 responded to the pre-intervention survey and 28 to the post-intervention survey. The resident’s self-assessment of their level of confidence increased from a median of 2 to 3.5 post-intervention ( $p < 0.001$ ). All residents thought the curriculum was beneficial, and only one of the residents surveyed said they did not view the content.

There are limitations to this study. The largest is that there is no standardized assessment of the resident’s ability to assess radiological images. While the residents self-reported they felt more confident, self-assessment is often an inaccurate evaluation of ability. Another limitation was the study was anonymous; therefore, the authors were unable to link pre and post-survey results and compare it to user utilization of the slack channel to determine if more utilization of the curriculum improved confidence with image interpretation.

-(Christopher Freeman, MD)

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