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Assessment of Gender Bias of Emergency Medicine Resident Physicians

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1 From Backcountry to Bedside: Training EM Residents in Decision-Making Under Pressure

Sarah Petelinsek, Ethan Grant, Theodore Hartridge, Rowan Kelner, Patrick Hughes

Objectives: This study evaluated whether outdoor experiential learning improves clinical decision-making education. We hypothesized that outdoor activities would enhance student awareness of decision-making processes and increase confidence in recognizing cognitive biases.

Methods: Emergency medicine (EM) residents at our institution were invited to participate in an outdoor experiential workshop. Prior to the workshop, residents completed a pre-course survey and selected one of three activities: advanced backcountry skiing, beginner backcountry skiing, or a backcountry rescue/snowshoeing activity. Residents were paired with trained backcountry guides and engaged in facilitated discussions on decision-making and bias recognition. Following the experience, participants completed a post-course survey assessing decision-making processes, overall workshop experience, and key takeaways. Pre- and post-course survey results were analyzed using a one-tailed two-sample unequal variance t-test. Data were reported as means and standard deviations.

Results: Of 36 eligible residents, 32 (89%) completed the pre-course survey and 20 (62.5%) completed the post-course survey. Participants reported high enjoyment (4.91 ± 0.30), increased bias awareness (4.52 ± 0.60), greater awareness of decision-making processes (4.48 ± 0.60), and perceived educational value (4.67 ± 0.48). Pre- and post-course comparisons showed significant increases in recognition of clinical/non-clinical decision-making parallels (mean increase 0.85, $P=0.001$), cognition around biases (mean increase 0.35, $P=0.02$), and understanding of biases (mean increase 0.30, $P=0.03$). Thematic analysis highlighted increased cognitive bias awareness, clinical application, teamwork, hands-on learning, and big-picture thinking.

Conclusion: Outdoor experiential learning is a feasible, novel, and well-received method for teaching clinical decision-making, significantly enhancing bias recognition and cognitive awareness.

2 Assessment of Gender Bias of Emergency Medicine Resident Physicians

Corinne Espinosa, Nileena Johnkutty, Courtney Knieriem, Alicia Rouff, Chiamaka Eneh, Amanita Setari, Gregory Neyman, Alyssa McQuillan, Skarleth Moran

Background: The perception of female physicians in

Emergency Medicine plays a crucial role in shaping the opportunities in a demanding medical specialty. Studies show female residents experience lack of mentorship and difficulties in establishing credibility. Initiatives have developed across residencies to promote diversity and we question whether they have been successful at implementing change.

Objectives: The purpose of this study is to assess the perception of gender bias within the emergency department, with an emphasis on female resident physicians.

Methods: A structured online, anonymous survey distributed to residents, advanced providers, and attending physicians involved in a 3-year emergency medicine program. They were asked to rate statements on a scale from 1-7 (1 is a strong disagreement and 7 is a strong agreement). Results were tabulated with counts, medians, IQRs, Mann Whitney U testing.

Results: Data from 48 participants, 50% identified as each gender and 56.3% are residents. The following questions were statistically significant in difference (p values 0.05-0.00007). Females were perceived more professional in behavior than men, men within the department can be patronizing to females ($p=.001$) and females opinions are overshadowed by males ($p=.0009$). Females felt co-workers perceived them as weaker members ($p=.003$) and males were seen as the leader in high stress situations ($p=.00007$). Females reported confidence was affected by how peers perceived them ($p=.007$), more gender bias ($p=.001$) and pushback from nursing $p=.003$). Only 24% report gender bias training.

Conclusion: Despite the emphasis on creating an inclusive environment, providers in emergency medicine still hold mixed perceptions of female emergency medicine physicians and data suggests female gender bias is present and may be a potential threat to female education. Further research is instrumental to determine steps necessary to create an equitable learning environment.

3 Patterns in Duration of Emergency Department Boarding and Variation by Sociodemographic Factors

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Background: Emergency department (ED) boarding negatively affects patient outcomes increasing length of stay, hallway care, and mortality. Prior research found disparities in capacity metrics like hallway care based on patient race/ethnicity, however whether boarding varies by sociodemographic factors is unclear.

Objectives: We examined whether duration of ED