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Moving Beyond Gender Disparities: A Call to Action for Gender Parity and Equity

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Decades of nearly equal representation of women in undergraduate medical education¹ have failed to yield gender parity (the approximately equal representation of women and men)² in Emergency Medicine (EM) clinical representation, rank advancement, or leadership. Currently, women compose only 36% of EM residents³ and 28% of active EM physicians.⁴ Among academic EM (AEM) faculty, women remain increasingly underrepresented at higher ranks and among leadership: as assistant professors (41%), associate professors (31%), full professors (23%), and department chairs (11%).^{5,6} COVID-19 has taken an additional toll, as women's academic progress has been disproportionately slowed, and women have been forced out of the workforce in droves.⁷

The “add women and stir” method has clearly failed,^{8,9} leading to increased attention to the lack of gender parity in EM. Although women are making incremental gains in aggregate representation in AEM, rank parity is not advancing.⁶ A recent analysis of AEM workforce data from 2015 to 2019 using the rank equity index (REI), a ratio of a cohort's representation at a higher rank to representation at a lower rank (eg, REI= Women Professors/Women Associate Professors; parity is an REI=1), demonstrated that women's rank progression is below parity for all rank comparisons and that rank advancement progress has stalled, particularly at higher ranks.^{6,10} Contributing to this lack of rank advancement are multiple factors including gender disparities in speaking engagements,¹¹ national awards,¹² authorship,¹³ membership on editorial boards,^{14,15} rank,¹⁶ promotion,⁶ leadership,^{17,18} and pay.¹⁹

Findings highlighted in this issue by Mannix et al. al²⁰ illustrate an additional niche in which gender disparity persists: podcasting. This analysis of publicly available data from three popular EM podcasts (Emergency Medicine Reviews and Perspectives [EM:RAP],

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Dr. Jarman conceived of the editorial outline and main topics, which were then critically appraised by both Dr. Hobgood and Dr. Madsen (via Zoom meeting). Dr. Jarman then drafted the editorial, which underwent multiple rounds of editing by each coauthor. All authors reviewed and approved the final editorial.

EMCrit, and Emergency Medicine Cases), demonstrates a lower overall proportion of women speakers (16.2%), both as podcast hosts (10.2%) and guests (23.4%). Authors also demonstrate that when women are podcast hosts, they have higher odds of having women guests. This finding aligns with other studies reporting that having women on conference planning committees increases the number of women speakers,²¹ that women authors are more likely to perform sex and gender-specific analyses,^{22,23} and that women department chairs have higher proportions of women on faculty.²⁴ Although the current study²⁰ shines a needed light on yet another area that lacks gender parity, we posit that this gap, and the many others described in the literature, are symptoms of a larger problem that remains untreated.

Addressing gender disparities will require a data-driven examination of the culture of EM, which will allow us to move beyond “the what” and “the where” of gender disparities to identify “the *why*” underpinning these gaps. Answering the essential question of *why* we are failing as a specialty to move the needle on gender parity also requires that we consider the role of gender *equity*. The term equity refers to fairness, justice, and freedom from bias;²⁵ in terms of gender equity, this means “leveling the playing field” for all genders by ensuring that each person has equal opportunities and access.²⁶ It has become increasingly clear that the issue in EM cannot be solved by equalizing representation by gender, but requires that the gendered experiences of the EM workplace be more closely examined. Gender parity does not equal gender equity.²⁷

There is robust data demonstrating gender disparities and inequities in AEM, yet there is little evidence on interventions to mitigate and eliminate them. This is not unique to AEM. Across all specialties, few studies of interventions to improve gender equity exist, and those that do often lack methodological rigor, and focus on individual women (“woman as deficit”) instead of systems-level interventions.^{28,29} AEM is advantaged, however, by strong evidence of best practices for achieving gender equity, developed through qualitative research and iterative task forces.^{30,31} Furthermore, AEM has alignment of our major professional organizations voiced through a comprehensive policy statement,³² demonstrating that the discipline recognizes the need for significant change. Given this knowledge, what are the most significant targets for interventions to achieve gender equity in AEM?

We know from recent evidence how women differ from men in their leadership emergence, which informs specific ways in which departments, institutions, and specialty societies can advance and support women’s leadership.^{33,34} These include early leadership development strategies tailored to women at all ranks and tiers that promote internalization of their leadership identity and tightly link their leadership to organizational purpose.^{30,33} In addition, we must provide robust mentorship & sponsorship programs,^{31,35} coaching, and validation of women’s leadership in order to build risk tolerance and encourage gender parity in leadership positions^{30,33,36,37} and develop structure and clarity on criteria for advancement.^{31,36,38} Women-focused professional organizations have also been shown to support the retention and advancement of women in AEM as well as facilitate leadership opportunities.^{35,39,40} Establishing programs and providing support to women that address these unique needs at each inflection point across the longitudinal continuum, within

our professional organizations and institutions, would represent meaningful progress in the support of women's advancement in AEM. These recommendations are particularly important, because when women are in positions of leadership, parity improves.^{21,24}

In addition to building interventions, we must define transparent benchmarks including time-bound goals toward the attainment of gender parity. We propose quantifying the improvements we expect to see over time in terms of women's representation in AEM generally and specifically in leadership roles including chair and vice-chair positions. As part of a comprehensive focus on developing women as leaders and preventing their attrition from the academy, we must reach a consensus on metrics⁴¹ that we can reasonably achieve in five to 10 years and work together to accomplish these. We propose that AEM adopt promotion as a comprehensive surrogate marker of academic productivity and the myriad of activities that constitute it. Therefore, benchmarks should be simplified and concentrated in the areas of promotion and leadership attainment. While we are calling for a macro-level commitment to this goal, it is our hope and supposition that individuals and organizations will also commit to this within their spheres of influence and microenvironments.

It is clear that the recruitment and retention of diverse faculty is critically important to EM. Further, inequities exist along many minoritized identities, including race, ethnicity, and non-binary gender identities, which must be integrated with efforts to achieve gender equity. EM's progress toward achieving a diverse workforce has stalled, and it's time to renew and recommit to our efforts to achieve parity, which requires addressing equity. It is no longer enough to simply describe disparities or to accept incremental improvement in aggregate numbers over time.⁴² We need stakeholders to engage and establish time-bound goals, using specific strategies for advancing women's leadership and rank advancement. We must hold ourselves accountable. Only then can we eliminate the many modifiable gender disparities seen in AEM and truly achieve gender equity.

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References

1. Colleges AAoM. Table B-2.2: Total Graduates by U.S. MD-Granting Medical School and Sex, 2016–2017 through 2020–2021. Accessed March 17, 2022, <https://www.aamc.org/data-reports/students-residents/interactive-data/2021-facts-enrollment-graduates-and-md-phd-data>
2. Dictionary MW. Parity April 28, 2022. <https://www.merriam-webster.com/dictionary/parity>
3. Colleges AAoM. 2018–2019 The State of Women in Academic Medicine: Exploring Pathways to Equity. Figure 5: Percentage of Women Residents by Specialty, 2018. March 17, 2022, <https://www.aamc.org/data-reports/data/2018-2019-state-women-academic-medicine-exploring-pathways-equity>
4. Colleges AAoM. Active Physicians by Sex and Specialty, 2019. Accessed March 17, 2022, <https://www.aamc.org/data-reports/workforce/interactive-data/active-physicians-sex-and-specialty-2019>
5. Colleges AAoM. 2019 U.S. Medical School Faculty; Table 13: Gender, Rank, and Department. Accessed March 17, 2022, <https://www.aamc.org/data-reports/faculty-institutions/interactive-data/2019-us-medical-school-faculty>

6. Hobgood C, Fassiotto M. Using the Rank Equity Index to measure emergency medicine faculty rank progression. *Acad Emerg Med*. Sep 2021;28(9):966–973. doi:10.1111/acem.14268 [PubMed: 33909327]
7. Gabster BP, van Daalen K, Dhatt R, Barry M. Challenges for the female academic during the COVID-19 pandemic. *Lancet*. Jun 27 2020;395(10242):1968–1970. doi:10.1016/S0140-6736(20)31412-4
8. Kuhn GJ, Abbuhl SB, Clem KJ, Society for Academic Emergency Medicine Taskforce for Women in Academic Emergency M. Recommendations from the Society for Academic Emergency Medicine (SAEM) Taskforce on women in academic emergency medicine. *Acad Emerg Med*. Aug 2008;15(8):762–7. doi:10.1111/j.1553-2712.2008.00190.x [PubMed: 18783488]
9. Amy Diehl ALS, and Leanne M. Dzubinski. Research: How Bias Against Women Persists in Female-Dominated Workplaces. *Harvard Business Review* Mar 2, 2022 2022;
10. Fassiotto M, Flores B, Victor R, et al. Rank Equity Index: Measuring Parity in the Advancement of Underrepresented Populations in Academic Medicine. *Acad Med*. Dec 2020;95(12):1844–1852. doi:10.1097/ACM.0000000000003720 [PubMed: 32889948]
11. Partiali B, Oska S, Touriel RB, Delise A, Barbat A, Folbe A. Gender disparity in speakers at a major academic emergency medicine conference. *Emerg Med J*. May 2021;38(5):379–380. doi:10.1136/emered-2019-208865 [PubMed: 31992568]
12. Fang AC, Chekijian SA, Zeidan AJ, Choo EK, Sethuraman KN. National Awards and Female Emergency Physicians in the United States: Is the “Recognition Gap” Closing? *J Emerg Med*. Nov 2021;61(5):540–549. doi:10.1016/j.jemermed.2021.07.009 [PubMed: 34364703]
13. Purdy ME, Zmuda BN, Owens AM, et al. Gender differences in publication in emergency medicine journals. *Am J Emerg Med*. Nov 2021;49:338–342. doi:10.1016/j.ajem.2021.06.039 [PubMed: 34229241]
14. Hutchinson D, Das P, Lall MD, Hill J, Fares S, Khosa F. Emergency Medicine Journal Editorial Boards: Analysis of Gender, H-Index, Publications, Academic Rank, and Leadership Roles. *West J Emerg Med*. Mar 2 2021;22(2):353–359. doi:10.5811/westjem.2020.11.49122 [PubMed: 33856323]
15. Miro O, Burillo-Putze G, Plunkett PK, Brown AF. Female representation on emergency medicine editorial teams. *Eur J Emerg Med*. Apr 2010;17(2):84–8. doi:10.1097/MEJ.0b013e32832e98f7 [PubMed: 19550342]
16. Madsen TE, Linden JA, Rounds K, et al. Current Status of Gender and Racial/Ethnic Disparities Among Academic Emergency Medicine Physicians. *Acad Emerg Med*. Oct 2017;24(10):1182–1192. doi:10.1111/acem.13269 [PubMed: 28779488]
17. Wiler JL, Wendel SK, Rounds K, McGowan B, Baird J. Salary disparities based on gender in academic emergency medicine leadership. *Acad Emerg Med*. Oct 24 2021;doi:10.1111/acem.14404
18. Lindner G, Rupp A, Exadaktylos AK, Ravioli S. Gender distribution in board memberships of emergency medicine societies. *Am J Emerg Med*. Sep 2021;47:176–179. doi:10.1016/j.ajem.2021.04.042 [PubMed: 33892332]
19. Wiler JL, Rounds K, McGowan B, Baird J. Continuation of Gender Disparities in Pay Among Academic Emergency Medicine Physicians. *Acad Emerg Med*. Mar 2019;26(3):286–292. doi:10.1111/acem.13694 [PubMed: 30664286]
20. Aea Mannix. Gender Distribution of Emergency Medicine Podcast Speakers. *Annals of Emergency Medicine* 2022;
21. Zaza N, Ofshteyn A, Martinez-Quinones P, Sakran J, Stein SL. Gender Equity at Surgical Conferences: Quantity and Quality. *J Surg Res*. Feb 2021;258:100–104. doi:10.1016/j.jss.2020.08.036 [PubMed: 33002662]
22. Merriman R, Galizia I, Tanaka S, Sheffel A, Buse K, Hawkes S. The gender and geography of publishing: a review of sex/gender reporting and author representation in leading general medical and global health journals. *BMJ Glob Health*. May 2021;6(5)doi:10.1136/bmjgh-2021-005672
23. Nielsen MW, Andersen JP, Schiebinger L, Schneider JW. One and a half million medical papers reveal a link between author gender and attention to gender and sex analysis. *Nat Hum Behav*. Nov 2017;1(11):791–796. doi:10.1038/s41562-017-0235-x [PubMed: 31024130]

24. Cheng D, Promes S, Clem K, Shah A, Pietrobon R. Chairperson and faculty gender in academic emergency medicine departments. *Acad Emerg Med*. Aug 2006;13(8):904–6. doi:10.1197/j.aem.2006.01.025 [PubMed: 16723723]
25. Dictionary MW. Equity. Accessed April 27, 2022. <https://www.merriam-webster.com/dictionary/equity>
26. L M. Gender Equity. In: AC M, ed. *Encyclopedia of Quality of Life and Well-Being Research*. Springer; 2014.
27. Kattapuram TM, Patel TY, Solberg AO. Gender Parity Does Not Equal Gender Equity: Continued Sexism in Medical Literature. *Ann Surg*. May 1 2021;273(5):e164–e165. doi:10.1097/SLA.0000000000004765 [PubMed: 33534234]
28. Lydon S, O’Dowd E, Walsh C, et al. Systematic review of interventions to improve gender equity in graduate medicine. *Postgrad Med J*. Apr 2022;98(1158):300–307. doi:10.1136/postgradmedj-2020-138864 [PubMed: 33637640]
29. Chen YW, Chang DC, Armstrong KA, Kelleher CM. “Women as Deficit”: Re-evaluating Interventions to Establish Gender Equity. *Ann Surg*. Jan 1 2022;275(1):37–38. doi:10.1097/SLA.0000000000005170 [PubMed: 34387210]
30. McIlveen-Brown E, Morris J, Lim R, et al. Priority strategies to improve gender equity in Canadian emergency medicine: proceedings from the CAEP 2021 Academic Symposium on leadership. *CJEM*. Mar 2022;24(2):151–160. doi:10.1007/s43678-021-00245-1 [PubMed: 35034336]
31. Madsen TE, Heron S, Lall MD, et al. Institutional solutions addressing disparities in compensation and advancement of emergency medicine physicians: A critical appraisal of gaps and associated recommendations. *Acad Emerg Med*. Jan 22 2022;doi:10.1111/acem.14452
32. Physicians ACoE. Overcoming Barriers to Promotion of Women and Underrepresented in Medicine (URiM) Faculty in Academic Emergency Medicine. Accessed April 27, 2022. <https://www.acep.org/globalassets/new-pdfs/policy-statements/overcoming-barriers-to-promotion-of-women-and-underrepresented-in-medicine-faculty-in-acad-em.pdf>
33. Hobgood C, Draucker C. Gender Differences in Experiences of Leadership Emergence Among Emergency Medicine Department Chairs. *JAMA Netw Open*. Mar 1 2022;5(3):e221860. doi:10.1001/jamanetworkopen.2022.1860 [PubMed: 35267032]
34. Sethuraman KN, Lin M, Rounds K, et al. Here to chair: Gender differences in the path to leadership. *Acad Emerg Med*. Sep 2021;28(9):993–1000. doi:10.1111/acem.14221 [PubMed: 33511736]
35. Oh L, Linden JA, Zeidan A, et al. Overcoming barriers to promotion for women and underrepresented in medicine faculty in academic emergency medicine. *J Am Coll Emerg Physicians Open*. Dec 2021;2(6):e12552. doi:10.1002/emp2.12552 [PubMed: 34984414]
36. Agrawal P, Madsen TE, Lall M, Zeidan A. Gender Disparities in Academic Emergency Medicine: Strategies for the Recruitment, Retention, and Promotion of Women. *AEM Educ Train*. Feb 2020;4(Suppl 1):S67–S74. doi:10.1002/aet2.10414 [PubMed: 32072109]
37. Madsen T, Hobgood C. The role of women’s consortia in the advancement of women in academic emergency medicine. *Acad Emerg Med*. Dec 2021;28(12):1480–1482. doi:10.1111/acem.14362 [PubMed: 34329512]
38. Choo EK, Kass D, Westergaard M, et al. The Development of Best Practice Recommendations to Support the Hiring, Recruitment, and Advancement of Women Physicians in Emergency Medicine. *Acad Emerg Med*. Nov 2016;23(11):1203–1209. doi:10.1111/acem.13028 [PubMed: 27286760]
39. Lin MP, Lall MD, Samuels-Kalow M, et al. Impact of a Women-focused Professional Organization on Academic Retention and Advancement: Perceptions From a Qualitative Study. *Acad Emerg Med*. Mar 2019;26(3):303–316. doi:10.1111/acem.13699 [PubMed: 30667132]
40. Sethuraman KN, Lall MD, Watts SH, Clem KJ. A Commentary on Impact of Women-focused Professional Organization and Academic Retention and Advancement: Perceptions From a Qualitative Study. *Acad Emerg Med*. Mar 2019;26(3):354–357. doi:10.1111/acem.13712 [PubMed: 30753748]

41. Cansino C, Khanna K, Johnson Bhembe X, Overholser B, Burstin HR, Spector ND. The Path Forward: Using Metrics to Promote Equitable Work Environments. *Pediatrics*. Sep 1 2021;148(Suppl 2)doi:10.1542/peds.2021-051440G
42. Sklar DP. Women in Medicine: Enormous Progress, Stubborn Challenges. *Acad Med*. Aug 2016;91(8):1033–5. doi:10.1097/ACM.0000000000001259 [PubMed: 27465080]

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