



Current disparities in gender and medical degree among emergency medicine authors

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Objective

Determine current disparities of gender (male v. female) and academic degree (MD v. DO) among authors of original research in five top emergency medicine (EM) journals for five years (2019–2023).

Background

Previous investigations on the demographics of authors publishing research in emergency medicine (EM) have demonstrated a disparity in publication rates, with male authors publishing more than female authors.

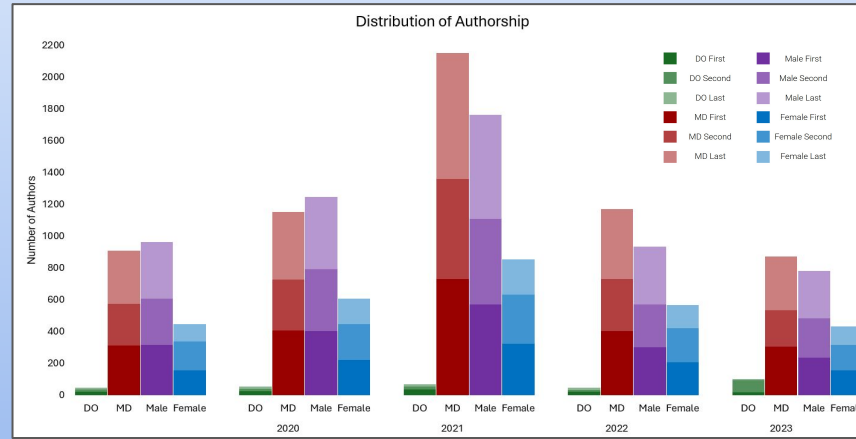
These studies have also shown that allopathic (MD) authors publish more EM research than osteopathic (DO) authors.

Methods

Study: retrospective review of original research in five high-impact EM journals (Academic EM, Annals EM, AMJEM, JEM, WJEM) for five years (2019-2023).

Analysis: >9,000 authors from 3,126 publications analyzed for:

- change over time in gender and degree of authors by both month and year (Kruskal-Wallis)
- first v. second v. last authorship (chi-squared)
- EM authors by gender and degree relative to total physician workforce (two-proportion Z-test)



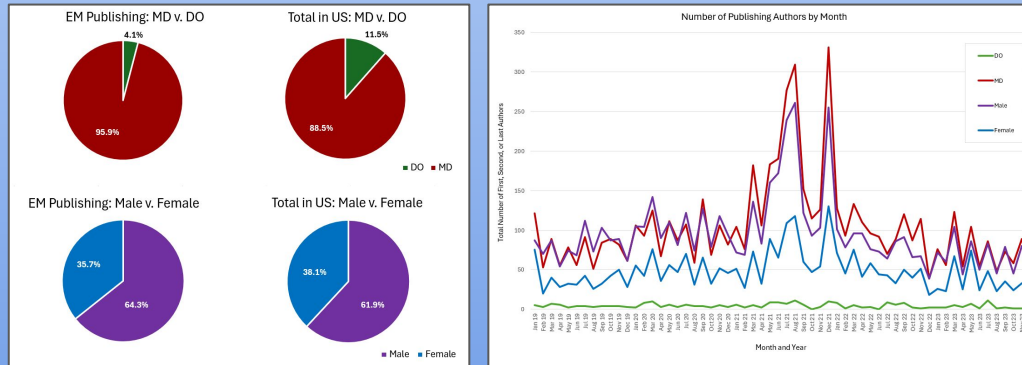
Results

Males and MDs publish more frequently and are more likely to be last authors, whereas females and DOs publish less frequently and are less likely to be last authors ($p < 0.001$).

The disparity between male and female publishing authors in high-impact EM journals is greater than the disparity of males and females in the ER physician workforce ($p < 0.001$): the proportion of male authors in EM research (64.3%) is higher than their proportion in the overall physician workforce (61.9%) and proportion of female authors in EM research (35.7%) is lower than their proportion in the overall physician workforce (38.1%).

Analysis by year shows a gradual increase in the proportion of female publications ($p = 0.016$) but with greater variability by month.

Analysis by month and by year suggests that MD authors continue to publish at disproportionately higher rates than their DO peers, with no significant decrease in the overall disparity.



Conclusion

Degree: MDs continue to publish original EM research at higher rates than DOs in high-impact journals, and more often as last authors. The proportion of EM publications from DOs is smaller than the proportion of practicing DOs.

Gender: males continue to publish original EM research at higher rates than females, but the gap is narrowing. The proportion of EM publications from female physicians is smaller than the proportion of practicing female physicians.

