



Breaking the Glass Ceiling: Gender Disparities in Anesthesiology Department Chair Positions in the United States



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BACKGROUND

- Despite more women entering medicine, gender disparities in leadership persist¹
- As of 2023, only 22.8% of clinical department Chairs were women²
- In anesthesiology, women comprised just 18% of Chairs, up from 8% in 2006
- Aims:** To analyze the demographics of anesthesiology department Chairs and identify strategies to address barriers to leadership advancement for women in the field

METHODS

- Public data from 133 AAMC-accredited anesthesiology departments (2024) were reviewed
- A detailed cross-sectional analysis of all faculty (Chairs and non-Chairs) from 45 selected departments was conducted (2022–23)
- Data sources:** Department websites, Scopus, Doximity, LinkedIn, and AAMC Faculty Roster
- Collected variables:** Gender (binary), advanced degrees, fellowship, professorship, H-index, M-quotient, citations, and publications
- Analysis:** Descriptive statistics for demographics; Inferential tests for Chairs vs. non-Chairs; Logistic regression to identify factors linked to Chair status

RESULTS

- Higher M-quotients, additional degrees, and professorships are linked to a greater likelihood of securing a department Chair position in academic anesthesiology (**Figure 1**)
- A significantly smaller proportion of women anesthesiologists hold senior academic ranks (**Figure 2**)
- Among current Chairs (107 men, 27 women), academic rank and bibliometric indices do not differ significantly—consistent with a recent study of 72 Chair CVs (**Table 1**)³

AUTHOR INFORMATION

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Ala Nozari served as a consultant for Third Pole Therapeutics and the Takeda Pharmaceutical Company. No conflicts of interest are relevant to this report.

RESULTS

Table 1. Academic and bibliometric characteristics of anesthesiology department Chairs (A) as well as Chair and non-Chair faculty in 45 selected programs (B) in the United States.

	A Anesthesiology Department Chairs			B Faculty in 45 Selected Academic Anesthesiology Programs		
Variable	Men (n=107)	Women (n=27)	P-value	Chair (n=45)	Non-Chair (n=3644)	P-value
Men Women	N/A	N/A	N/A	37 (82.2) 8 (17.8)	2285 (63.0) 1342 (37.0)	0.008
Academics						
MD/MBBS DO	103 (97.2) 3 (2.8)	26 (96.3) 1 (3.7)	>0.999	43 (97.7) 1 (2.3)	3443 (95.0) 182 (5.0)	0.724
Additional degree	44 (41.1)	7 (25.9)	0.185	13 (28.9)	408 (11.2)	0.001
Fellowship	69 (64.5)	16 (59.3)	0.658	25 (55.6)	1738 (47.9)	0.368
Professorship	77 (76.2)	22 (81.5)	0.796	36 (80.0)	498 (13.7)	<0.001
Bibliometrics						
H-index	13.5 (5–35)	12.0 (5–23)	0.391	14 (8–36)	2 (0–5)	<0.001
M-quotient	0.6 (0.3–1.4)	0.7 (0.3–1.1)	0.741	0.6 (0.3–1.3)	0.3 (0.2–0.6)	<0.001
Total citations	900 (185–4925)	851 (119–2621)	0.467	1084 (337–5124)	16 (0–155)	<0.001
Total publications	45.5 (12–134)	36 (14–81)	0.172	41 (20–116)	3 (0–11)	<0.001

DISCUSSION

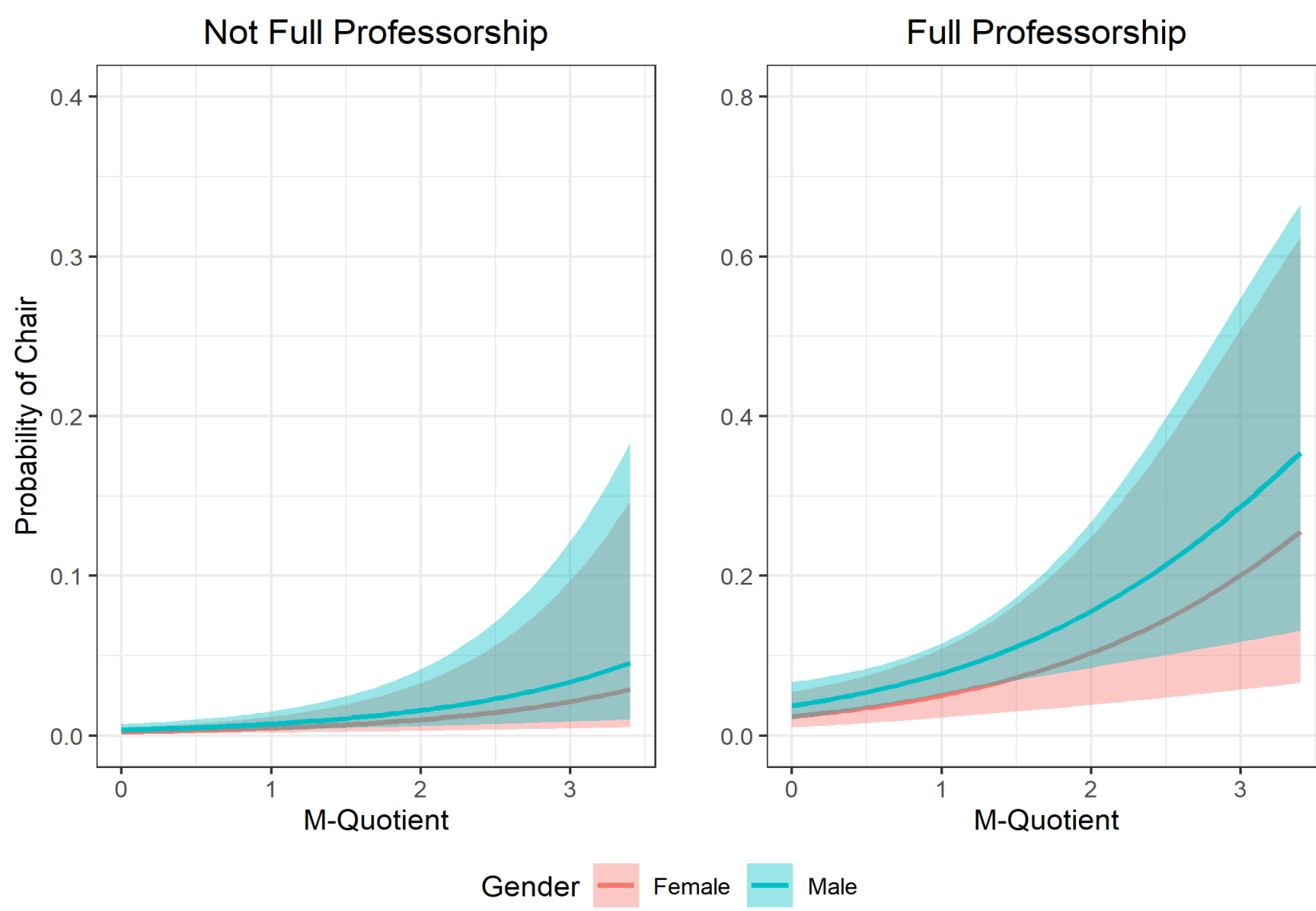


Figure 1. Predicted probability of being a chair with the m-quotient stratified by academic rank and colored by gender.

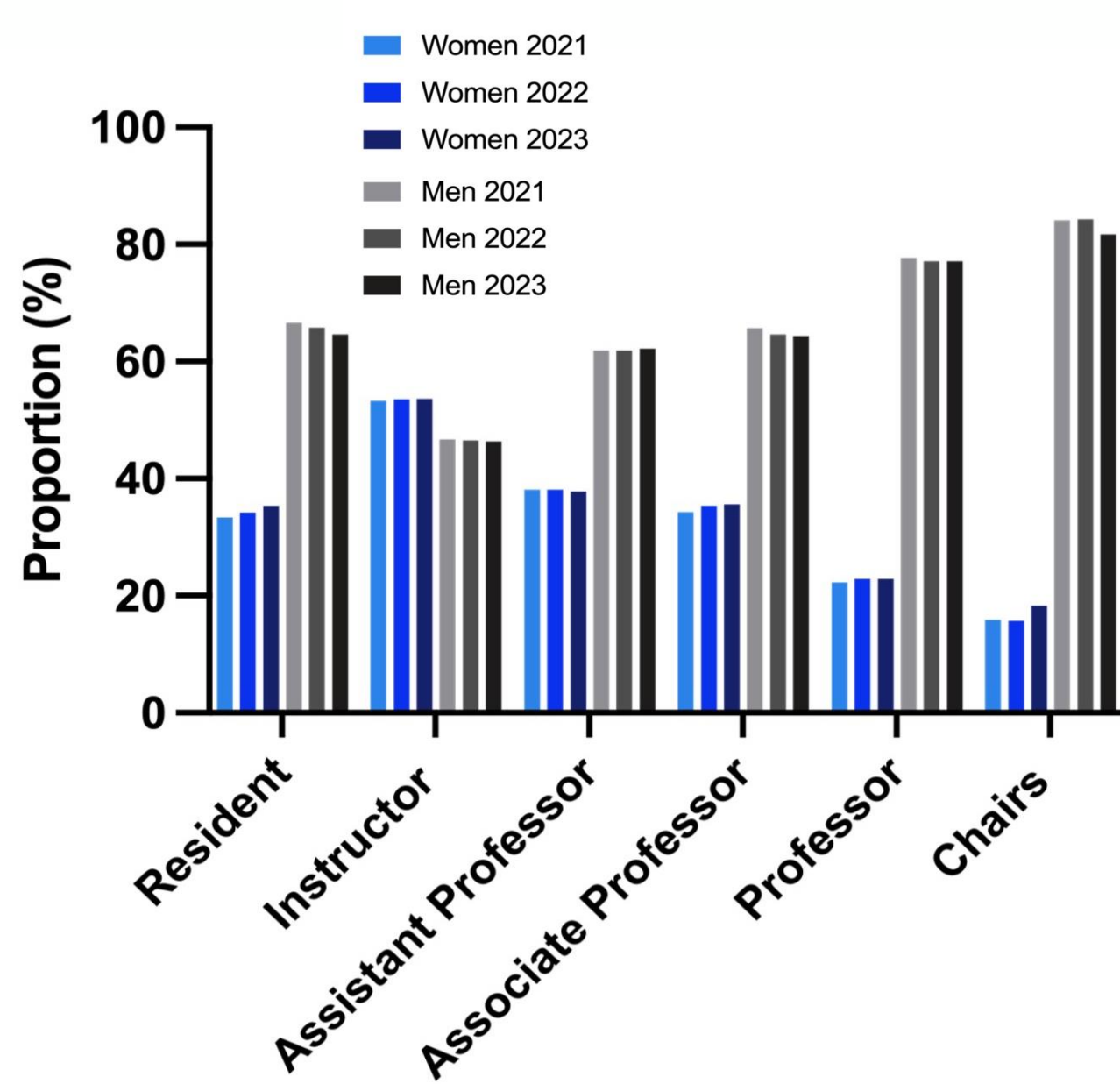


Figure 2. Proportion of women and men in academic anesthesiology positions.

DISCUSSION

Challenges for Women Anesthesiologists

- Face significant barriers to academic advancement despite comparable qualifications
- Lead the development of fewer clinical guidelines, despite similar quality⁴
- Younger faculty are increasingly women, but systemic issues driving the leadership gap persist.

Strategies for Advancement

- Implement targeted mentorship and leadership development programs
- Foster environments with equitable parental leave, childcare, and bias reduction initiatives

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