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BACKGROUND

- Gender disparities in academic productivity have been documented across medical specialty leadership.
- A prior analysis of radiology subspecialty fellowship directors (FDs) demonstrated no significant gender differences in academic metrics among pediatric, nuclear, musculoskeletal, and abdominal radiology FDs.
- However, no study has specifically examined these differences among neuroradiology FDs.
- This study aims to analyze potential gender-based differences in academic metrics among neuroradiology FDs in the United States.

METHODS

- We obtained a list of ACGME-accredited neuroradiology subspecialty fellowship programs from the ACGME website.
- Data collected for analysis included age and gender (sourced from healthgrades.com), and academic metrics including peer-reviewed publications, h-index, and citation count (retrieved from the Scopus database).
- The data were compiled into an Excel spreadsheet and analyzed using the Jamovi statistical package.

RESULTS

Descriptives

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	Gender	N	Mean	Median	SD	Minimum	Maximum
Citations	F	19	980.1	316.0	2409.82	30.00	10795.0
	M	72	738.1	395.5	910.07	3.00	4806.0
Publications	F	19	40.9	24.0	62.77	1.00	279.0
	M	72	32.0	26.5	25.40	2.00	134.0
H-Index	F	19	11.1	10.0	11.27	1.00	53.0
	M	72	10.6	10.0	6.83	1.00	33.0

Independent Samples T-Test

Independent Samples T-Test			
		Statistic	p
Citations	Mann-Whitney U	609	0.467
Publications	Mann-Whitney U	649	0.736
H-Index	Mann-Whitney U	640	0.667

Note. $H_a: \mu_F \neq \mu_M$

- Of the 93 subspecialty FDs identified, 2 were excluded due to incomplete Scopus data, leaving 91 FDs (19 women, 72 men) available for analysis.
- Women FDs demonstrated a mean citation count of 980.1 (SD = 2409.82) compared to 738.1 (SD = 910.07) for men FDs, with no statistically significant difference (U = 609, p = 0.467).
- Publication counts averaged 40.9 (SD = 62.77) for women and 32.0 (SD = 25.40) for men, showing no significant difference (U = 649, p = 0.736).
- The h-index analysis revealed similar results between women (mean = 11.1, SD = 11.27) and men (mean = 10.6, SD = 6.83), with no significant difference (U = 640, p = 0.667).

DISCUSSION/CONCLUSION

- This analysis of 91 neuroradiology FDs reveals no statistically significant gender differences in academic productivity metrics.
- Women FDs demonstrated comparable or slightly higher mean values for citations, publications, and h-index.
- These findings, along with previous analyses of other radiology subspecialties, suggest emerging gender parity in academic achievement at the fellowship leadership level.
- However, a notable gender disparity was observed in the composition of neuroradiology FDs, with a 21/79% F/M split, contrasting with a more balanced 46/54% F/M distribution in other radiology subspecialties.
- While the data challenges historical perceptions of gender disparities in academic medicine and indicates equitable opportunities for scholarly achievement, the underrepresentation of women in neuroradiology leadership positions warrants further investigation.
- Qualitative research is needed to uncover factors contributing to this gender imbalance and identify potential barriers to women attaining leadership roles in neuroradiology.