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Invited Commentary

Time to end the secrecy: Publish salaries to narrow the gender-based wage gap in surgery

Gender inequity in medicine and particularly in surgery is well recognized but poorly understood. Women are significantly less likely than men to achieve high-level academic promotion, comprise fewer than 5% of upper echelon leadership positions, and are at higher risk of attrition from academic surgery.[1–3] While the drivers of this inequity are multifactorial, explicit and/or unconscious biases of traits and behaviors that men and women are expected to display form prescriptive gender norms.[4] These biases are also believed to perpetuate well-known disparities in salary, start-up packages for new hires, retention packages, and service expectations. Surgical specialties have the highest adjusted gender-based differences in salary within medicine.[5] A commonly stated belief for this disparity is child-bearing during early practice years. However, even when such demographic characteristics are adjusted for, an unaccounted wage gap persists.[6]

This article is of great interest given recent attention by the media, surgical societies, and leaders within academic surgery to close the gender achievement gap in academic surgery, specifically focusing on wage equity. Maxwell et al., present an analysis of gender-based differences in compensation amongst surgeons practicing at Veterans Affairs Medical Centers (VAMC).[7] The authors retrospectively analyzed the salaries of 1993 surgeons employed by the Veterans Health Administration (VHA) in 2016, hypothesizing gender-neutral compensation practices, given that the VHA has objective criteria which are used to establish salaries, as well as transparency in salary data.

Female surgeons represented 23% of the overall study pool. Female surgeons tended to be fewer years out of medical school and have lower h index scores compared to male surgeons. There was also a disparity in academic rank, with fewer female surgeons holding the academic rank of “professor”. The authors report that overall, female surgeons in the VAMC are paid significantly less than male surgeons. In uncontrolled analyses, female surgeons are paid less than male surgeons within each faculty rank except “professor”. Female surgeons are also paid less than male surgeons when 11–20 years and 21–30 years out from medical school graduation. However, within each specialty, the authors found no significant difference in salaries among male and female surgeons. They report underrepresentation of female surgeons in the higher paying surgical specialties such as orthopedic surgery and neurosurgery, and overrepresentation in lower paying specialties such as obstetrics and gynecology, and propose that as the cause of the overall gender based disparity in salaries in the VHA.

The authors have identified a pressing issue in medicine. Gender-based salary disparities are reported across medical and surgical specialties.[6,8] Multiple studies have revealed that after adjusting for factors such as rank, experience, and specialty, women continue to have an unexplained wage gap of almost 10%.[5,9] Even with a spotlight on salary disparities in surgery, consensus in surgical societies, and statements by prominent surgeon-leaders on the importance of equity, this wage gap persists.[10,11] Additionally, women remain underrepresented in higher paying specialties, including higher paying surgical specialties. Women make up the majority of breast and ob/gyn surgeons, the lowest paid surgical specialties. They comprise fewer than 10% of the highest paying fields, such as neurosurgery, orthopedic surgery, and cardiothoracic surgery.[12] The VHA findings are consistent with these known data. The results reported by the authors suggest that even in systems such as the VHA that institute equal pay for males and females within a specialty, a gender based wage gap will persist in surgery until women are more equally represented in the highest paid fields, or salaries are increased for specialties that attract more women.

The good news from the authors' report is that salaries within fields can attain parity across genders. While causation is not possible to prove here, the report suggests that intentional strategies may overcome explicit or implicit bias historically associated with wage gaps. THE VHA model to determine salaries include institution of objective criteria to make salary decisions, limiting the potential for negotiation at time of hiring, and publicly reporting salary data. These strategies, if implemented widely, may cause current gender based salary disparities in surgery to narrow. Academic surgical departments and surgical practices should adopt these procedures without delay. Start-up and retention packages should be designed based on transparent and established criteria, and net compensation, inclusive of all bonuses and productivity incentives, should be publicly reported. There will remain a gap in attracting women to higher paying specialties, and in increasing compensation in female dominated specialties. Mitigating these gaps will require scalable implementation of strategies that are effective, including but not limited to addressing explicit and implicit biases encountered by women in these fields, improved mentorship at the medical student level, more attention to recruitment and nurturing, elimination of wage disparities within and amongst these fields, and constant evaluation and continuous quality improvement to assess changes that are effective and sustainable. True parity will remain elusive until society as a whole and the medical profession in particular starts to value the work performed by women, including by women surgeons. However, public availability of hard data will allow these discussions to be informed,

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and for institutional leadership to be held accountable where disparities persist.

Declaration of competing interest

The authors declare there is no conflict of interest.

References

1. Association of American Medical Colleges. *The State of Women in Academic Medicine: The Pipeline and Pathways to Leadership, 2015–2016*. Washington, DC: Association of American Medical Colleges; 2016. Available at: https://www.aamc.org/system/files/reports/1/2015table11.pdf. Accessed March 31, 2020.
2. Abelson JS, et al. The climb to break the glass ceiling in surgery: trends in women progressing from medical school to surgical training and academic leadership from 1994 to 2015. Am J Surg, Vol. 212, Issue 4, pp.566–572.e1.
3. Cochran A, Neumayer LA, Elder WB. Barriers to careers identified by women in academic surgery: a grounded theory model. *Am J Surg*. 2019;218(4):p780–785.
4. Cochran A, et al. Perceived gender-based barriers to careers in academic surgery. *Am J Surg*. 2013;206(2):p263–268.
5. Jena AB, Olenski AR, Blumenthal DM. Sex differences in physician salary in US public medical schools. *JAMA Internal Medicine*. 2016;176(9):1294–1304.
6. Jagsi R, et al. Gender differences in salary in a recent cohort of early-career physician-researchers. *Acad Med*. 2013;88(11):1689–1699.
7. Maxwell, et al. Gender and compensation among surgical specialties in the Veterans Health Administration. *Am J Surg*. 2020.
8. Sangji NF, et al. Gender disparity in trauma surgery: compensation, practice patterns, personal life, and wellness. *J Surg Res*. 2020;250:179–187.
9. Freund KM, et al. Inequities in academic compensation by gender: a follow-up to the national faculty survey cohort study. *Acad Med*. 2016;91(8):1068–1073.
10. American College of Surgeons. Statement on gender salary equity. Available at: https://www.facs.org/about-acs/statements/101-gender-salary-equity; 2017. Accessed March 26, 2020.
11. Association of Women Surgens. Statement on gender salary equity. Available at: https://www.womensurgeons.org/page/SalaryStatement; 2017. Accessed March 26, 2020.
12. Accreditation Council for Graduate Medical Education. Data resource book 2017-2018. Available at: http://www.acgme.org/About-Us/Publications-and-Resources/Graduate-Medical-Education-Data-Resource-Book. Accessed March 26, 2020.

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