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Readers of *CUAJ* will likely be aware of the recent, provocative, Ontario-based study supporting previous literature highlighting gender-based disparities in medical practice. This cross-sectional, population-based study using administrative databases¹ documents contemporary inequity in income across surgical specialties, with marked differences in earnings between males and females. These imbalances were present after controlling for differences in hours worked or procedure duration. The authors contend that the opportunity to perform the most lucrative procedures is different between the sexes. Although the results for urological care were not statistically significant, the overall trend of these findings should stimulate a call for a fulsome analysis of drivers of gender-based disparities in our specialty. This issue of *CUAJ* expands on this topic, describing gender-related discrepancies in academic urology in Canada.² We asked Dr. Ashley Cox, program director at Dalhousie University and consulting editor of *CUAJ*, to comment on her thoughts and experiences.

In an era where modern society is focused on minimizing gender as a binary entity, there continues to be a wide breadth of literature focusing on gender disparities throughout the field of medicine. In Canada, Gawad et al recently found that female surgeons are less likely than their male counterparts to receive promotion to full professor,³ while Dossa et al confirms gender-based disparities in the hourly earnings of surgeons in a fee-for-service system.¹ In this issue of *CUAJ*, Ilin et al sought to evaluate publication productivity and rank differences of female and male academic urologists in Canada.² In this retrospective, cross-sectional study, data was collected (January 2017 to June 2019) from 12 of 13 academic centers. As a method of assessing academic productivity, they compared the Hirsch (h)-index of male and female urologists. To account for duration of practice (temporal bias), which is not completely accounted for using the h-index, the authors computed the m-quotient for each faculty member to represent a more accurate picture of academic performance.

Not surprisingly, the authors found that as academic ranks increased, the number of female urologists decreased. In fact, there were only four female professors, four female associate professors, and 14 female assistant professors in urology across Canada. They found a significant difference in the number of publications, citations, and h-index between female and male academic urologists. Female urologists were described as less productive. However, when calculating the m-quotient (and therefore, accounting for time in practice), the authors found that there was no significant difference between female and male clinicians in academic urology.

This paper reveals a lack of females in senior academic leadership roles and, in addition, suggests that female academic urologists have fewer publications than their male counterparts. These findings are not surprising. The first female to enter a urology residency in Canada didn't do so until the early 1970s.⁴ The field of urology is yet to turn 50 years old when it comes to females in practice. This paper should be applauded for attempting to even the playing field by using the m-quotient to minimize the temporal bias from the use of the h-index alone. At this point, though, the number of women practicing urology in Canada is still too few to make a global comparison. Undoubtedly, with more time (and slowly more women entering into our specialty), it will become clear whether or not there truly is a gender-related discrepancy in academic urology in terms of productivity and opportunity.

Unfortunately, this paper only focused on number of research publications as a measure of value. After recently completing my promotion application (results

pending), I have learned that there are several measures of academic productivity in addition to publications. Certainly, the time and labor spent on the recent implementation of Competence By Design curriculum must be considered academic productivity. Without doubt, educational endeavors in undergraduate, postgraduate, or CME domains represent high value to our society. Yet I am quite certain many of the urologists (male or female) involved in these processes have not received many publications or an increase in their h-index.

In order to robustly examine gender disparities in academic productivity, it would be novel to determine: whether female urologists are being turned down from academic positions they apply to; whether they are having more papers rejected from publication; and whether they have less success with grant funding. In addition, it should be ascertained whether female academics are applying for promotion and what the success rate is for them compared to their male counterparts. I would like to know the ratio of female urologists in academia to female urologists in community practice. Beyond this, and maybe more importantly, is there a gender-based disparity in surgical leadership roles across both academic and community hospitals across Canada? A simple gender-based ratio of surgical department/division chairs or chiefs of surgery/staff across Canada would seem to be simple to report and would truly indicate the depth of the any potential systemic bias.

It is encouraging to see that, as time goes on, there are more female medical students applying to urology and more female residents entering academic careers in our specialty. In fact, since the time of e-publication of the article by Ilin et al, the numbers have changed. There is now a female academic urologist at McMaster University, the University of Western Ontario, and at least two at the University of Toronto. Only time will tell if these positive changes will translate to gender-neutrality in terms income, opportunity, and recognition. More importantly, as a specialty (and like the rest of modern society), we should not solely focus on gender as a differentiator. We should be more globally attentive to ability. In Canada, we should be centered on recruitment of the most talented, dedicated, and innovative urologists regardless of gender.

References

1. Dossa F, Simpson AN, Sutradhar R, et al. Sex-based disparities in the hourly earnings of surgeons in the fee-for-service system in Ontario, Canada. *JAMA Surg* 2019;154:1134-42. <https://doi.org/10.1001/jamasurg.2019.3769>
2. Ilin J, Langlois E, Jalal S, et al. *Can Urol Assoc J* 2020;14:106-10. <http://dx.doi.org/10.5489/cuaj.6117>
3. Gawad N, Tran A, Martel AB, et al. Gender and academic promotion of Canadian general surgeons: A cross-sectional study. *CMAJ* 2020;8:E34-40. <https://doi.org/10.9778/cmajo.20190090>
4. Hill C. On becoming the first woman urologist in Canada. *CMAJ* 1980;122:356.

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