ABOUT THE AUTHOR



MARIE-CLAUDE ROBERT, MD: Marie-Claude Robert is a clinical associate professor at the Université de Montréal. She obtained her undergraduate and medical degree from the University of Ottawa. She completed her residency at the Université de Montréal and her fellowship training in Cornea at the Massachusetts Eye and Ear. She manages and performs complex surgeries of the ocular surface, cornea and anterior segment for adult and pediatric patients. She is director of research in ophthalmology at the Centre Hospitalier de l'Université de Montréal and at the Centre Hospitalier Universitaire Sainte-Justine. Her research focus includes severe inflammatory ocular surface diseases and the development of artificial corneas.

The Evolving Role of Women in Ophthalmology: Can They Truly Lean In?

Marie-Claude Robert, MD

Affiliations:

Department of Ophthalmology, Université de Montréal, Montreal, Quebec Department of Ophthalmology, Centre Hospitalier de l'Université de Montréal (CHUM), Montreal, Quebec Department of Ophthalmology, Centre Hospitalier Universitaire Sainte-Justine

Correspondence:

Marie-Claude Robert

Email: marie-claude.robert.2@umontreal.ca

Financial Disclosures:

None

Acknowledgment: I would like to thank Dr. Yvonne Buys for the tremendous work she has done documenting gender disparity in Canadian ophthalmology for over a decade. Her work and that of her colleagues has been instrumental in the preparation of this article.

Background

I will soon be celebrating the 10-year anniversary of my graduation from medical residency. As an ambitious, high-achieving individual, I have striven to do my best, courageously (and sometimes obliviously) confronting the various challenges that I have encountered. Over the years, I built my "village of support" and I was convinced I could have it all.

In those 10 years, I have completed a two-year fellowship, had three children, taken on several

research endeavours/projects and have risen through my university's academic ranks. I have a rewarding but busy practice caring for wonderful patients of all ages. I have had the opportunity to build an amazing career in ophthalmology. I have been able to "lean in".

Ten years ago, leaning in became a call to action for high-achieving women like me. At that time, Sheryl Sandberg, the Chief Operating Officer (COO) at Facebook published a book entitled "Lean In: Women, Work, and the Will to Lead". Women were

encouraged to be confident and assertive, seizing opportunities for career advancement, as represented by the image of a strong woman physically leaning in at the head of the table. While this is all wonderful and encouraging, the phrase "lean in" places the responsibility of gender equality on women. However, female success and career fulfillment are products of societal conventions and involve pillars relating to gender equality. Equality is the term to emphasize the need to address the context of women's status in society and their intrinsic role in childbearing and childcare (in contrast to equity, which is defined as placing men and women on equal footing in the workplace).

In the past decade, have women in ophthalmology truly been able to lean in? Each individual should be able to define what leaning in means for them, their family and their career. With the reality of life's complexities, each individual needs to find the worklife balance to suit their personality and ambitions. In my view, a female ophthalmologist is leaning in when she feels empowered and satisfied "by the wind in her sails and the direction of her ship". In this sense, female ophthalmologists are likely to be leaning in. Various studies reveal that female ophthalmologists in Canada appear to be very satisfied with their career and their satisfaction level is equal to that of male ophthalmologists.^{2,3} On the other hand, burnout and depression are more common among female physicians.4 How can one explain such discrepancies?

Female Ophthalmologists: The Numbers

In 2020, women represented 27% of all ophthalmologists in Canada. However, the proportion of women in practice varies dramatically between provinces, from 11% in Newfoundland and Labrador to 41% in Quebec.5 With Quebec as a leader in female representation in ophthalmology, I am fortunate to have had several amazing female mentors with laser-sharp acuity who have played a key role in fostering women's success in the ophthalmology sector. Unfortunately, Quebec ophthalmology is an anomaly. All the other Canadian provinces fall below the national average for female representation in our specialty. Furthermore, the proportion of female ophthalmologists in Canada significantly lags the numbers found among physicians in general, where women represent 43.7% of the workforce. Ophthalmology programs have been shown to admit female residents in similar proportion to that of male residents who apply, suggesting that there is no gender bias

in the selection process.⁶ This is surprising as ophthalmology is often considered a "lifestyle" surgical specialty, perhaps more conducive to achieving the much sought after work life balance. So, the question remains as to why female medical students are not applying in the first place and what barriers potentially remain in place.

I navigated toward ophthalmology thanks to great mentors. Do we have sufficient female mentors in ophthalmology? In a recent study, women represented 23% of ophthalmology leaders, including 31% of department heads and 27% of residency program directors. There is a similar proportion of male and female ophthalmologists achieving the title of full professor or other academic appointments. Therefore, women hold a near representative proportion of leadership roles in the Canadian ophthalmology landscape.

What challenges remain?

Income

Several studies have shown that female ophthalmologists earn less than their male counterparts.^{5,8-12} While the fee for service payments in Canada may suggest that this discrepancy is due to women working less, Canadian female ophthalmologists have been shown to work hours similar to those of their male counterparts.3 Alternative explanations are that female physicians provide longer consultation time (either by choice or by patient expectation) or that female physicians' practices are systematically biased toward lower paying services.^{2,3} For example, women are provided approximately half of their male counterparts' operating time and surgical volume, despite similar clinical activity.^{2,3} For every cataract surgery, female ophthalmologists conduct a significantly higher number of clinic visits which are remunerated at a lower rate. 13 In addition, men are much more likely to be high-volume cataract surgeons.^{1,14} This difference may begin in residency, with female residents being given significantly less surgical volume and opportunity than their male counterparts.15

Furthermore, proportionally more men (41%) than women (15%) pursue fellowship training in the highest paid subspecialties such as vitreoretinal surgery. Conversely, U.S. data shows that more women pursue fellowship training in lower paying subspecialties such as pediatric ophthalmology (12%) and neuro-ophthalmology (3%), compared

to men (5% and 0% respectively). 11 Things are not very different in my department: Five out of six neuro-ophthalmologists and four out of six pediatric ophthalmologists are female, while 9 out of 11 vitreoretinal surgeons are male. Unfortunately, the pay gap persists even after controlling for factors including part-time work, practice type and subspecialty. 16

Finally, male physicians reach peak productivity between ages 45 and 59, while female physicians reach peek productivity at 55 to 59 years of age. ⁶ This delayed and shorter productivity period is likely due to the fact that, in general, female ophthalmologists assume a greater share of domestic and childcare responsibilities, and are not able to reach peak productivity before experiencing an empty nest. ²

Childbearing and childcare

The decision to have children is entirely personal, with many wonderful reasons for and against. As stated above, childrearing is likely to have an impact on a female ophthalmologist's income. In addition, children provide ample opportunity to dispose of that income and create a perpetual mental load, which is often borne by women. While children are absolutely worth it, these factors may impede women's ability to lean in to their careers.

To be or not to be (a mom ophthalmologist)

In 2014, 90% of male and 81% of female Canadian ophthalmologists had children.3 This trend toward lower natality among female ophthalmologists has been reported in a number of studies. 10,17,18 In addition, women have their children later than their male counterparts. In Australia and New Zealand, female ophthalmologists have their first child at an average age of 35.10,17 By delaying childrearing until after their training, female ophthalmologists have less time to plan their family, and place themselves at higher risk of infertility and pregnancy complications.¹⁸ Indeed, the rate of pregnancy loss for female surgeons is twice that of the general population.¹⁸ Conversely, male ophthalmologists often begin their families during training with little to no impact on their training program. Consequently, female ophthalmologists are less likely to have three or more children than male ophthalmologists.3 The age ranges of surgical training and childbearing tend to overlap and there is a need to find more flexible and adaptive methods to allow women to succeed at both.

The emotional (and laundry) load

Female ophthalmologists are much more likely to be the primary caregivers of their children when compared to male ophthalmologists.^{2,3,17} The spouses of female ophthalmologists in Canada are more frequently employed full-time and are more often physicians themselves. Conversely, the spouses of male ophthalmologists are more frequently employed part-time or are not employed.^{2,3} This additional load translates to 51% of female ophthalmologists believing that childbearing slowed their career versus 15% among men.³

I believe that several hidden challenges remain. which are often not discussed publicly. Society's perception of female physicians is different than that of male physicians in ways that cannot be accurately quantified. Patients expect a different level of empathy, communication and time from their female physicians. Taylor Swift explains this discrepancy beautifully: "There is a different vocabulary for men and women in the music industry. A man does something, it's strategic. A woman does the same thing, it's calculated. A man is allowed to react, a woman can only overreact." This inappropriate labelling exists in ophthalmology, as well. Female ophthalmologists receive a greater number of complaints than their male counterparts, especially in academic practices. 19 Female colleagues with long clinic wait times are labelled as "clueless," "not respectful" and "greedy" on the RateMD website. Male colleagues with similar wait times receive comments such as "excellent surgeon even if you have to wait" and "patients have to understand that this ophthalmologist has a subspecialty and his time is important". Similarly, significantly more female ophthalmology residents and fellows face workplace bullying or harassment. 20,21 Significantly more female physicians also report being humiliated, ignored, excluded, or unrecognized in the workplace.22 Recognizing the bias in the hurtful comments mentioned above can only help empower young female physicians and change mindsets.

Tips on Leaning In

Confidence is a necessary tool for leaning in.
Recognition and acknowledgment of gender biases have helped me understand the medical system, relieved me of some self-doubt, and provided me the poise and strength necessary for me to advocate for myself. Open communication with colleagues and mentors is an invaluable source of shared experiences, support and wisdom.

Organization is important and having an organized family life is dependent on all its members. Spouses, grandparents, nannies, neighbours, and the children themselves can be involved to allow for personal space to reflect on and engage in one's career. Shared calendars and chat groups are an excellent way to keep everyone in tune. Relationship and family goals, as well as task and mental load distribution, should be discussed early and continuously with one's partner.

In the end, leaning in is possible. We need to take ownership of our successes and merits. We need to acknowledge the gender imbalances that prevent the equal empowerment of our female colleagues. In the meantime, let's continue to put in the work to strive and thrive!

References

- Sandberg S. Lean In: Women, work and the will to lead. New York: Knopf; 2013.
- Jinapriya D, Cockerill R, Trope GE. Career satisfaction and surgical practice patterns among female ophthalmologists. Canadian Journal of Ophthalmology. 2003 Aug 1;38(5):373-8.
- McAlister C, Jin YP, Braga-Mele R, DesMarchais BF, Buys YM. Comparison of lifestyle and practice patterns between male and female Canadian ophthalmologists. Canadian Journal of Ophthalmology. 2014 Jun 1;49(3):287-90.
- Wong AM. Beyond burnout: looking deeply into physician distress. Canadian Journal of Ophthalmology. 2020 Jun 1;55(3):7-16.
- Buys YM, Bellan L. Updated inventory and projections for Canada's ophthalmology workforce. Canadian Journal of Ophthalmology. 2022 Jul 1.
- Buys YM. Aging and feminization of the physician workforce in Canada: comparing ophthalmologists to all other physicians. Canadian Journal of Ophthalmology. 2014 Jun 1;49(3):291-6.
- Nguyen A, Wen Y, Tanya S, Hardy I. Analyse genrée du leadership et de l'impact scientifique chez les leaders de l'ophtalmologie universitaire canadienne. Université de Montréal Department of Ophthalmology Research Day; October 2022.
- Gill HK, Niederer RL, Shriver EM, Gordon LK, Coleman AL, Danesh-Meyer HV. An eye on gender equality: a review of the evolving role and representation of women in ophthalmology. American Journal of Ophthalmology. 2022 Apr 1;236:232-40.
- Reddy AK, Bounds GW, Bakri SJ, Gordon LK, Smith JR, Haller JA, Berrocal AM, Thorne JE. Differences in clinical activity and Medicare payments for female vs male ophthalmologists. JAMA Ophthalmology. 2017 Mar 1;135(3):205-13.
- Danesh-Meyer HV, Deva NC, Ku JY, Carroll SC, Tan YW, Gamble G. Differences in practice and personal profiles between male and female ophthalmologists. Clinical & Experimental Ophthalmology. 2007 May;35(4):318-23.
- Jia J, Lazzaro A, Lidder A, et al. Gender compensation gap for ophthalmologists in the first year of clinical practice. Ophthalmology. 2021;128:971-80.
- Buys YM, Canizares M, Felfeli T, Jin Y. Influence of age, sex, and generation on physician payments and clinical activity in Ontario, Canada: an age-period-cohort analysis. American Journal of Ophthalmology. 2019 Jan 1;197:23-35.

- Feng PW, Ahluwalia A, Adelman RA, Chow JH. Gender differences in surgical volume among cataract surgeons. Ophthalmology. 2021 May 1:128(5):795-6.
- 14. Micieli JA, Trope GE, Buys YM. Gender gap and declining surgical activity among new graduates: cataract surgery in Ontario. Canadian Journal of Ophthalmology. 2016 Jun 1;51(3):154-60.
- Gong D, Winn BJ, Beal CJ, Blomquist PH, Chen RW, Culican SM, Glass LR, Domeracki GF, Goshe JM, Jones JK, Khouri AS. Gender differences in case volume among ophthalmology residents. JAMA Ophthalmology. 2019 Sep 1;137(9):1015-20.
- Grossman RC. The Gender Pay Gap in Medicine: Causes and Solutions. In: Gender Equity in the Medical Profession 2020 (pp. 110-127). IGI Global.
- Jain NS, Kersten HM, Watson SL, Danesh-Meyer HV. Gender differences in Australasian ophthalmologists' experiences of the workplace. Clinical & Experimental Ophthalmology. 2019 Aug;47(6):706-12.
- Rangel EL, Castillo-Angeles M, Easter SR, Atkinson RB, Gosain A, Hu YY, Cooper Z, Dey T, Kim E. Incidence of infertility and pregnancy complications in US female surgeons. JAMA Surgery. 2021 Oct 1;156(10):905-15.
- Kohanim S, Sternberg Jr P, Karrass J, Cooper WO, Pichert JW. Unsolicited patient complaints in ophthalmology: an empirical analysis from a large national database. Ophthalmology. 2016 Feb 1;123(2):234-41.
- Jain NS, Gill HK, Kersten HM, Watson SL, Danesh-Meyer HV. Bullying and harassment in ophthalmology: a trainee survey. The New Zealand Medical Journal (Online). 2020 Apr 3;133(1512):102-3.
- 21. Meyer JA, Troutbeck R, Oliver GF, Gordon LK, Danesh-Meyer HV. Bullying, harassment and sexual discrimination among ophthalmologists in Australia and New Zealand. Clinical & Experimental Ophthalmology. 2021 Jan;49(1):15-24.
- Rouse LP, Gallagher-Garza S, Gebhard RE, Harrison SL, Wallace LS. Workplace bullying among family physicians: a gender focused study. Journal of Women's Health. 2016 Sep 1;25(9):882-8.