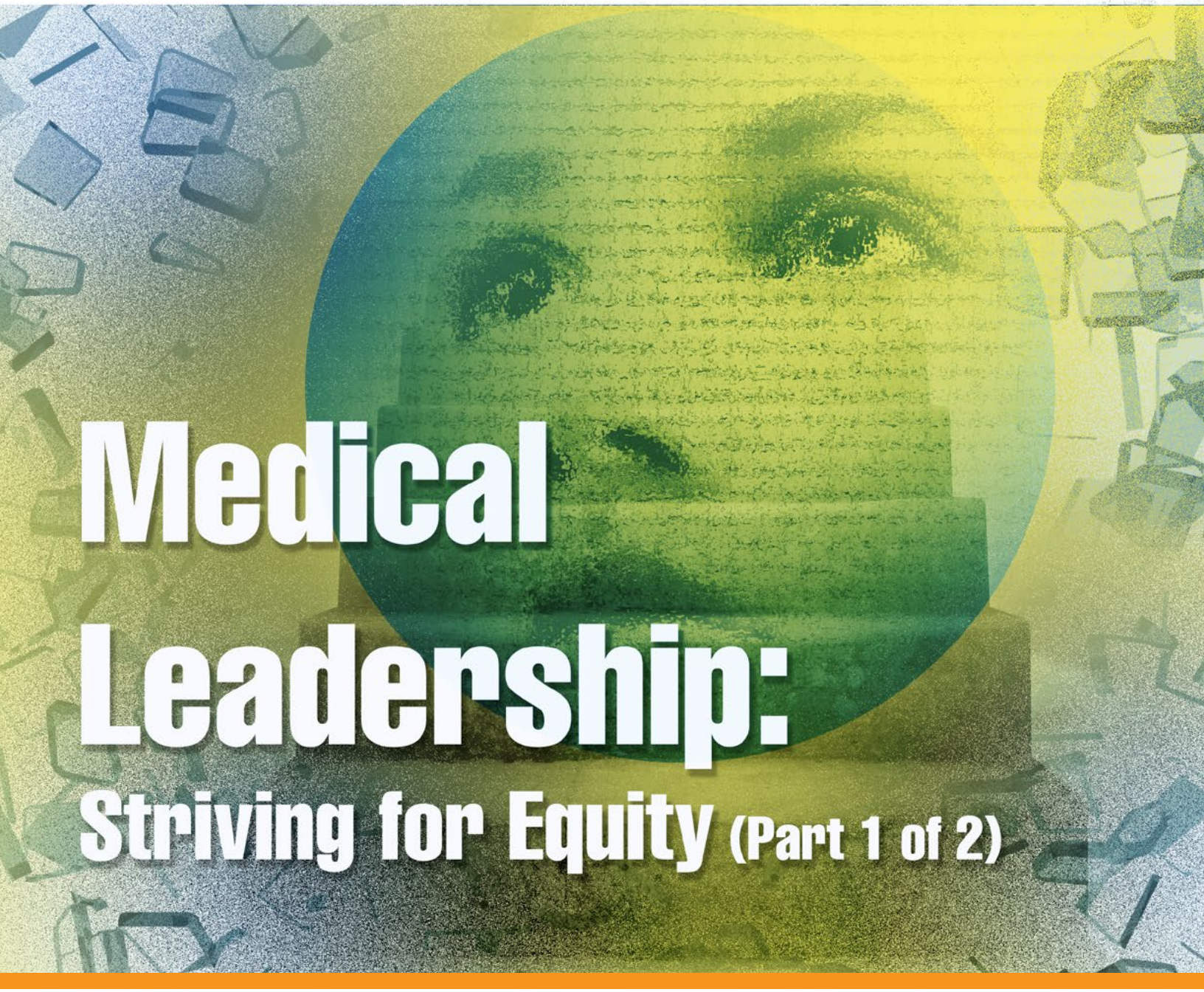
CANADIAN JOURNAL OF

Volume 5 Number 1
2018

Physician Leadership

THE OFFICIAL MAGAZINE OF THE CANADIAN SOCIETY OF PHYSICIAN LEADERS



Medical Leadership: Striving for Equity (Part 1 of 2)

In this issue

CSPL Canadian Society of Physician Leaders
SCLM Société canadienne des leaders médicaux

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ISSN 2369-8322

EDITORIAL

Are we there yet?

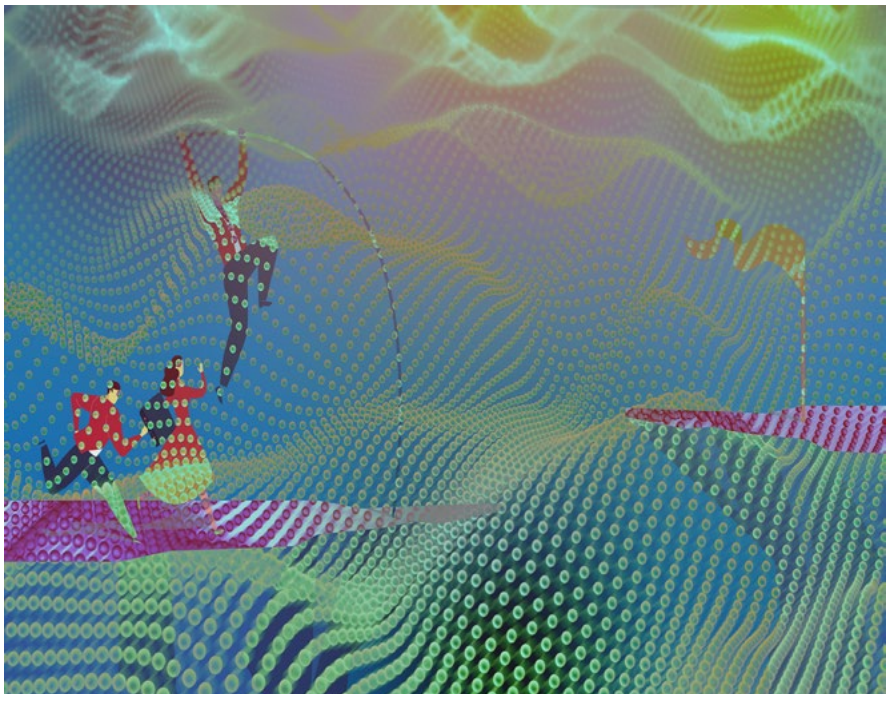
Johny Van Aerde, MD, PhD

With the start of its fifth year, CJPL is pleased to dedicate this entire issue to women physicians and leadership. Despite contributions from the frontline, academia, and administration, from general practitioners and specialists, from physicians in training and established physicians with different cultural backgrounds, it is difficult to be inclusive and find representatives from all sections and groups of our rich community of women physician leaders. Because diversity in itself is so much broader than issues related specifically to women in our field, the next issue of CJPL will be dedicated to diversity in medical leadership.

The wave of feminism in the 1960s and 70s did not equalize opportunities for men and women; it just allowed women to enter the workforce. Medicine saw the number of women in medical school rise, and, by the mid-90s, the percentage of male and female graduates was about equal. But women are still underrepresented in leadership positions. The glass ceiling in the health system remains as intact as in many other industries. As a result, women have remained mostly invisible in leadership positions. They head fewer than 30% of hospitals and other health care organizations, and that number is even lower in research-intensive teaching hospitals and faculties of medicine.

The lack of gender parity in health leadership positions can be attributed to both cultural assumptions about women's leadership capabilities and to systemic gender barriers that inhibit the potential of women as leaders. Some, if not all, of those cultural assumptions and mental models held by both men and women go back to the beginning of humanity. Our preconceived notions about masculinity and femininity influence how we interact with and evaluate colleagues in the health care work place. The simple fact that physicians enter the workforce later in life than graduates in many other industries makes it even more difficult for women physicians who choose to start a family.

There are signs of hope that a tipping point might be close. Both the Canadian Medical Association and the Canadian Medical Protective Association elected a woman physician as their president this year, and several provincial medical associations,



regulatory colleges, and health regions are led by women. In our organization, the CSPL's presidency alternates between women and men, and the CJPL's editorial board has a balanced composition. Canadian academic institutions remain behind, with only two women currently serving as dean of medicine. Furthermore, although there might be visible changes at the top of many Canadian health care organizations, the move toward gender equity has not permeated all levels.

In this issue of CJPL, we hope to show that all of us, men and women alike, have to understand and acknowledge how stereotypes and biases cloud our beliefs and perpetuate the status quo. Both men and women have been shown to carry such biases, making women both victims and perpetrators of sexism, consciously and subconsciously. True equality, perhaps even equity, for women as physician leaders will only be achieved when we all fight the stereotypes that hold us back, while talking openly about mental models and behaviour will bring assumptions and stereotypes into the conscious.

Clearly, we are not there yet.

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ADVICE

Confidence: a key ingredient in leadership success

by Mamta Gautam, MD, MBA, Monica Olsen, MHRD, and Mary Yates, MEd

Despite the increasing number of women in medicine, they remain underrepresented in leadership roles. Women often decline leadership roles for practical reasons, but also because they lack confidence. Women physicians consistently identify three related themes that undermine their confidence and contribute to their reluctance to seek leadership roles: perfectionism, the inner critic, and the imposter syndrome. We offer tips to help women overcome these obstacles and increase their level of confidence to match their level of competence.

KEY WORDS: women leaders, confidence gap, barriers to success, inner critic, imposter syndrome, perfectionism

Although there are more women in medicine now than ever before, gender parity is still not reflected in leadership roles in medicine.[1] McKinsey has identified four main barriers to women's advancement in the workplace: structural obstacles; lifestyle choices; institutional mind-sets; and individual mind-sets, including the confidence gap between women and men.[2] Even among successful women interviewed, more than half felt that they had held themselves back from accelerated growth. Most said they should have cultivated sponsors earlier because a sponsor would have pushed them to take opportunities that they did not take advantage of on their own. A recent survey from Queen's University indicated that women physicians declined faculty roles because of family commitments and work-life balance and, again, highlighted their uncertainty of being successful in the role as a key factor.[1]

While fully acknowledging the cultural and institutional barriers to female success, Mangurian and colleagues[4] – who have been facilitating physician leadership development for over 30 years – found the lack of confidence and uncertainty of success in women physician leaders of most interest. Based on a McKinsey study[5] of top-ranking female executives that identified confidence, grit, and resilience as the three top capabilities that women need to thrive as leaders, workshops for women leaders in medicine were designed for participants to gain specific competencies in these areas.

The confidence gap

Confidence is a feeling of self-assurance arising from one's appreciation of one's own abilities or qualities. Conversations during workshops aimed at women physician leaders reinforce the fact that a confidence gap between men and women exists. Women physicians consistently identify three related themes that undermine their confidence and contribute to their reluctance

to seek leadership roles: perfectionism, the inner critic, and the imposter syndrome.

"If I take something on, I have to do it right."

Pefectionism is a common trait among physicians, both men and women.[6] This characteristic serves us well in achieving excellence in patient care. However, as a leader, one must take risks in which a perfect outcome is not guaranteed. Women physician leaders report hesitating to take action when risks are involved for fear of failure, of resultant procrastination, and of being judged more harshly than their male colleagues when things do not go perfectly.[7]

"My colleagues are so much smarter than I am. Who am I to think I am in their league?"

A critical inner voice expresses criticism, frustration, or disapproval of our actions. It becomes our persistent negative self-talk. Such shame can lead to loss of self-esteem and avoidance behaviours, again preventing us from stepping forward into a leadership role.

"I've managed to fool everyone so far, but someone will find me out one of these days."

The term "imposter syndrome" was first coined by Pauline R. Clance and Suzanne A. Imes[8] in 1978, while they were conducting research on high-achieving women. They found that many of these women dismissed their success as either luck or having deceived others into believing that they are more competent than they really are. The imposter syndrome is, ironically, quite common among

high achievers and can lead to the discounting of accomplishments and a reluctance to try new things because of a fear of failure.

This lack of confidence and associated fear of failure comes up consistently and clearly in workshops. Women in medicine express fears about both taking on a leadership role and moving on to the next step in their leadership trajectory. Commonly expressed fears include disappointing others, not having the confidence to accept the challenge, effects on my self-confidence if I fail, being discovered to be not good enough, and not being worthy. It is interesting to note that few women physicians identify lack of skills as one of their fears.

Why the confidence gap matters

The elusive nature of confidence in women has been studied extensively by Kay and Shipman.[9,10] As they interviewed accomplished and credentialed women, they "kept bumping up against a dark spot that we couldn't quite identify, a force clearly holding them back." The more closely they looked for examples of "raw, flourishing female confidence," the more they found evidence of its shortage.

Their data show that women are less self-assured than men and that, to succeed, confidence matters as much as competence. A Hewlett Packard internal report found that men apply for a job or promotion when they meet only 60% of the qualifications, but women apply only if they meet 100% of them.[11] What held them back was not their ability, but rather the decision not to try. Ultimately, success correlates more closely with confidence than with competence.

The confidence gap matters, because the natural result of under-confidence is inaction.

We simply do not reach out to move toward what we want. In contrast, confidence leads to action. It allows us to change our mindset and choose to try, make repeated attempts, undertake calculated risk-taking, and fail fast when required. As we stop trying to be perfect, we can start being prepared to fail, embracing failure as forward progress and an opportunity to learn. Belief in our success stimulates action, which then builds and reinforces confidence once we take action.

Practical tips to increase confidence

Women must increase their level of confidence to match their level of competence.

It is clear that confidence trumps competence at work. Despite having the competence, women need to increase their level of confidence to succeed. Luckily, with effort, self-confidence can be learned, practised, and mastered — just like any other skill. Zenger Folkman's research[12] shows that as women's experience increases over time, so does their confidence.

Here are some practical strategies that will help you increase your confidence.

- Embrace your uniqueness. Genuinely confident people do not feel they have anything to hide and can be authentic and comfortable being who they are. Honestly assess your core values, expertise, and strengths. You are not your job title, but rather what you stand for and value.
- **Adopt a growth mindset.** Carol Dweck[13] described the concept of a growth mindset as one in which you believe you can continually learn new things and improve and grow. Look at experiences as adventures and opportunities to learn, instead of another chance to fail. Confidence results from action, from trying and making progress, not from achieving perfection.
- **Be prepared.** Empower yourself with knowledge. Prepare, study, practice, become competent.
- **Disarm the inner critic.** Silence that nagging, negative internal voice. Imagine a volume control and lower the volume. Recognize the imposter syndrome, journal thoughts to validate and process them, reframe and balance your thinking so it more accurately reflects your abilities.
- **Visualize success.** When doing something for the first time, close your eyes and visualize yourself succeeding. That will help you see you can do it.
- **Shift from me to we.** When we shift our focus from proving our self to doing great things for the organization, the greater goal can allow us to act. We feel more purpose driven, in keeping with our passion, values, and purpose.
- **Project a confident image and body language,** considering your posture, smiling, eye contact, and speech. The simple act of

pulling your shoulders back can give the impression of confidence. Smiling makes you feel better and helps others feel more comfortable around you. Maintain eye contact, speak slowly and clearly. Dress like the person you want to become.

- **When in doubt, act.** The natural result of low confidence is inaction. When women hesitate because we aren't sure, they hold themselves back. Leave your comfort zone, step forward and take action, despite your doubts. The only sure way to fail is to do nothing and not even try.
- **Fail fast.** Be fearless. If you do not succeed, acknowledge it, learn from it, turn the page, and move on. Do not dwell on failure, be proud that you tried and learned.

- **It's not personal.** Remember, people are not thinking about you all the time. We are just not that important! When you receive a comment, don't take it personally; just say "Thanks for the feedback." Consider it to see what you can learn. In the words of Eleanor Roosevelt, "You wouldn't worry so much about what others think of you if you realized how seldom they do."
- **Rewire, not ruminate.** Do not ruminate about failure or less than stellar results. Instead, use cognitive behavioural therapy: stop and think about three things you do well to balance and challenge the feeling of being a failure.
- **When you succeed, take credit.** Do not dismiss your efforts by saying you were "just lucky" or "in the right place at the right time." Star in your own production; toot your own horn and share achievements and successes instead of focusing on imperfections.
- **Repeat, repeat, repeat.** Keep up the effort and persistence, practice stepping out of your comfort zone, and be willing to learn.
- **Speak up.** When you have something to say, speak up and add your thoughts to advance the discussion and thinking. Studies show that when men are in the majority, women speak 75% less!
- **Take care of yourself.** When you feel better, you feel more in control and more confident. Take time to sleep, exercise, meditate, practise gratitude, and set realistic goals.

At some point in their professional life, most people will feel as if they are a fraud and on the verge of being found out. Although it is okay to feel like this, it is not okay to allow that to hold you back. When you start to question yourself, pause and balance that thought so that you can move forward and regain your confidence. Once your confidence starts to align with your competence, you are on your way to success. Once you start to build confidence, it keeps increasing over time.

References

1.Glauser W. Rise of women in medicine not matched by leadership roles. *CMAJ News* 2018;Mar. 26. Available: **https://tinyurl.com/ya8a2nbb**
2.Barsh J, Yee L. Unlocking the full potential of women at work. Toronto: McKinsey & Company. Available: **https://tinyurl.com/yaeawvxa**
3.Archer S. Women in medicine: where are we 150 years after Dr. Emily Howard Stowe, Canada's first female physician? News, innovations and discoveries blog (July 11). Kingston: Queen's University Dept. of Medicine; 2018. Available: **http://deptmed.queensu.ca/blog/?p=1783**
4.Mangurian C, Linos E, Sarkar U, Rodriguez C, Jagsi R. What's holding women in medicine back from leadership. *Harv Bus Rev* 2018;19 June. Available: **https://tinyurl.com/ycd6efrk**
5.Yee L. Fostering women leaders: a fitness test for your top team. *McKinsey Q* 2015;Jan. Available: **https://tinyurl.com/ybk4pmpw**
6.Peters M, King J. Perfectionism in doctors. *BMJ* 2012;344:e1674.
7.Brown B. *The gifts of imperfection*. Center City, Minn.: Hazelden Publishing; 2010.
8.Clance PR, Imes SA. The impostor phenomenon in high achieving women: dynamics and therapeutic intervention. *Psychother-Theor Res* 1978;15(3):241-7.
9.Kay K, Shipman, C. *The confidence code: the science and art of self-assurance – what women should know*. New York: HarperCollins; 2014.
10.Kay K, Shipman, C. The confidence gap. *Atlantic* 2014;May. Available: **https://tinyurl.com/y8ohmobl**
11.Sandberg S. *Lean in: women, work, and the will to lead*. New York: Knopf; 2013.
12.Zenger J. The confidence gap in men and women: why it matters and how to overcome it. *Forbes* 2018;8 Apr. Available: **https://tinyurl.com/yddf4hev**
13.Dweck CS. *Mindset: the new psychology of success*. New York: Ballantine; 2006.

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This article has been peer reviewed.

PERSPECTIVE

Women and rural physician leadership

by Sarah Newbery, MD

Rural physicians already have a wider scope of practice, higher workloads, greater difficulty accessing continuing medical education, and limited specialist consultation compared with their urban counterparts. As the demand for effective clinical governance, quality improvement, and more formal accountability increases, a commensurate increase in physician resources is needed to lead that work. The proportion of women in rural family medicine is increasing. If we take seriously the need for effective leadership in small systems, then we need to support women to have the capacity to do the work of leadership in small systems effectively.

KEY WORDS: leadership, rural practice, women physicians

Marathon is a community on the North Shore of Lake Superior with a population of approximately 3600. The hospital and family health team there also serve the communities of Biigtigong First Nation and Pic Mobert First Nation and offer obstetrical support to other area communities.

The back story

In 1996, my friend and colleague Rupa Patel and I came to do a site visit in Marathon, Ontario, on the North Shore of Lake Superior. We were both finishing a few months of "enhanced skills" PGY3 time in preparation for rural practice and, together with our physician partners, Eli and Mike, we were looking for a community that needed us.

At the time, there was one physician in full-time practice in Marathon and a retired general surgeon who was doing part-time general practice. Approximately 85 physicians had come and gone over the preceding 10 years, and Marathon's health care system had become unstable. The hospital had lost its accreditation and when, during our site visit, we met the hospital board members, we were shown the stack of burlap sacks that had been prepared to cover the "blue H" hospital signs on the highway. The closure of the hospital's ER was anticipated if the community was not successful in recruiting.

I was struck by a comment from one of the board members: "The community has never had women physicians before.... I'm not sure how long you'll last." He expressed happy surprise when he learned that our husbands were also family physicians: they were getting four docs, not two and, moreover, they were getting two more male physicians to whom the community was accustomed.

When we were joined by another two physicians, also a couple, we formed a group of seven rural generalist family physicians: four men and three women. At the time, Marathon was "designated" for five physicians only, and some thought we were foolish to "over doctor" the community.[1,2] Statements like, "You won't be busy enough" followed by "you won't make enough money" were commonly expressed by other colleagues.

So why would we come to this small town, against others' good counsel, given all the issues the community faced? We chose to come, in part, because the one physician in full-time practice was willing to embrace a shared leadership model and, in part, because we believed that in having "too many" doctors, we could

create a sustainable local health care system for the community.

Now, 22 years later, although as expected in rural communities, clinicians have come and gone, our clinical group has maintained a "full complement" or more of physicians, except during two 3-month periods. Although I have no formal data, I have come to understand that this is an exceptionally rare thing in the context of rural medicine in Canada over the past two decades.

In Northwestern Ontario, as the proportion of female physicians in rural practice has increased, so too has their proportion in some leadership roles.

The current state

Our physician group demographic has shifted and is now made up of five women and two men. Ten years ago, physicians led the move locally from a physician-based clinic with a small support staff to a collaborative interprofessional family health team with a physician-led governance model. Our clinic physician group is also our highly collaborative hospital medical staff. Through our clinic and hospital settings, we meet the obligations of our "Rural and Northern Physician Group Agreement"[3] to provide care for all who live within our postal code catchment for primary care, ER, and inpatient services 24/7/365. Twenty-two years ago, we led the redevelopment of a low-risk obstetric program that continues still, and we provide local chemotherapy, palliative care, and primary care-based chronic pain and addictions management. Each of these domains of care has required a commitment to clinical leadership.

Our local leadership style is both practical and collaborative. Although some of us have formal leadership roles (chief of staff, chair of board), much of our local clinical leadership is determined informally based on who on our team has the energy, capacity, and passion for particular issues. Our work together is guided by a mission, vision, and principles statement that supports decision-making and helps us maintain our focus on our local social accountability.

We are intentional about working to balance local clinical needs with the needs of our families, our professional interests, and our personal interests outside of medicine in things like coaching local teams, supporting local community initiatives, travel, and personal learning and growth.[4] Although there was no LEADS framework at the time, our work here began with local social accountability and, I think, a somewhat intuitive understanding that if we could lead ourselves as individuals (Leads self) and support each other in our work (Engaging others), we could achieve local results. Ensuring that we had adequate local capacity to go beyond the clinical demands meant that we had time for reading, learning at the point of need, and intentional conversation about applying principles of collaborative leadership.

Over time, as members of our group have become more "seasoned" clinicians and our local capacity has been sustained, we have been able to explore research and have taken up formal leadership roles with the Northern Ontario School of Medicine, our regional Local Health Integration

Network, and the Ontario College of Family Physicians. Together, we have been able to do this because of a focus on ensuring that our local physician resource capacity considers the needs, goals, and interests of our clinician group beyond day-to-day clinical medicine.

As Dr. Eli Orrantia stated in his 2005 article, "Making a priority of keeping a balance in our lives has provided the creative energy to continue investing in our profession."[4]

Rural physician resources, female physicians, and leadership

Small systems require effective leadership for all of the same reasons that large health care systems do. One of the current significant challenges in small systems is that, as the demand for things like effective clinical governance, quality improvement, and more formal accountability increases, there has not generally been a commensurate increase in physician resources to lead that work.

In Northern Ontario, work has just begun to examine the need to match physician resource planning to demands beyond the more traditional clinical workload. Matching physician resources to community and health system needs, changing community demographics, and the needs of physicians is complicated and dynamic. It includes consideration of the challenges of historic maldistribution, increasing numbers of women in family medicine, and the workload of rural generalists.

We know that, while 18% of Canadians live in rural and remote communities, only 8% of Canada's physicians work in those communities[5]; almost all are family physicians. And we know that the proportion of women in medicine is increasing. In fact, between 1986 and 2009, the proportion of female physicians overall increased from 18%[6] to 40%.[7] In parallel, the proportion of family physicians who are female in 2015 was cited to have increased to 43.2%.[8]

There appears to be a difference in the way that rural and urban family physicians work and in the hours that they devote to clinical work overall. A 2010 study by the Canadian Collaborative Centre for Physician Resources[9] noted that rural family physicians reported working more hours in direct patient care and on call than did their urban counterparts. In addition, rural physicians have a significantly wider scope of practice than urban counterparts and need to maintain competence in different clinical areas (ER, obstetrics, palliative care) despite having higher workloads, having greater difficulty accessing continuing medical education, and having no professional backup and limited specialist consultation.[10]

In Northwestern Ontario, as the proportion of female physicians in rural practice has increased, so too has their proportion in some leadership roles. As one example, in Northwestern Ontario, there has been a shift from having no female hospital chiefs of staff in 1996, to six out of 14 in 2018.

The challenge of limited human resources in rural settings not only affects the ability of rural physicians to meet local clinical needs, but also increases the difficulty they have in obtaining access to leadership education, mentorship, and support and in participating meaningfully in leadership roles in the organizations that shape rural health care in domains of education, policy, and health care delivery.

If we are going to succeed in improving equitable access to high-quality care for rural Canadians, then rural physicians need to be able to participate meaningfully at these broader policy tables as well. That success will depend on having adequate local physician resources, understanding the particular working patterns of rural women physicians, and enhancing access to leadership education and mentorship.

Required support for effectiveness

The little research on rural leadership that exists comes mainly from the nursing profession or other international jurisdictions. Hana and Rudebeck[11] looked at rural clinician leadership in northern Norway, and their results resonate with me and colleagues with whom I have explored the thinking. These researchers note that the important work of leadership in rural settings is

typically done "off the side of the desk" without the ability to create committed time for the key functions of leadership: setting a vision, guiding activities, and building relationships.

Rural health care teams often do not have the luxury of selecting local physicians for their leadership skills.[11] There is rarely a list of candidates for rural physician vacancies. Small community health care system stability, then, sometimes rests on the serendipity of leadership interests of the clinicians they are able to recruit and whether the community can recruit to full complement, so that those with leadership interests can create the time to exercise their leadership skills. Given the desperate shortage of clinicians in many rural communities, the adage that "beggars can't be choosers" is one that often informs the recruitment approach and can create significant challenges for rural communities that need good local leadership.

Contrary to the situation in rural environments, when clinicians enter academic domains or urban hospital departments, some do so with an interest in leadership and with a desire to pursue advancement in leadership. Hana and Rudebeck[11] found that the motivation for leadership is not the same in rural areas and settings. In our case, as in many rural areas I have seen, those in rural leadership roles are seen to "have drawn the short straw," to have been the one "to have blinked first" or simply "it must have been their turn." Leadership does not have the same cachet as it does in other settings and is not often seen as an achievement but rather as a burden to be borne for a while until another colleague's turn comes around.

Yet, effective local leadership with support for skills acquisition, time to devote to local system development and evolution, and time to sustain collegial relationships and mentor new clinicians to practise may be a key part of what is needed to create sustainable, robust rural clinical groups that can meet the needs of the whole of the rural or remote community.

The proportion of women in family medicine is increasing. Anecdotally, the proportion of women in rural family medicine is also increasing.

The opportunity

The proportion of women in family medicine is increasing. Anecdotally, the proportion of women in rural family medicine is also increasing. If we take seriously the need for effective leadership in small systems, then we need to support women to have the capacity to do the work of leadership in small systems effectively.

We must recognize not only the evolving practice patterns of women, but also the need to include committed leadership time when we think about the number of physicians we should plan for in rural and remote settings. We need to take steps to negotiate for working conditions that allow for the capacity to take on valuable leadership roles.[12] We need to support all leaders in rural settings, men and women alike, with the tangibles of mentorship and education.

There is an opportunity to continue to build on the good work that has begun in some medical schools in developing leadership curriculum. Even if that early exposure is only to give medical students the language of leadership, an understanding of the importance of Leading self and Engaging others, and the importance of effective leadership in all settings, including small rural ones, we will have offered our graduates a head start as they enter into practice.

The CSPL white paper "Accepting our responsibility: a blueprint for physician leadership in transforming Canada's health care system"[12] makes several important calls to action to individuals, organizations, and associations. Although perhaps it is implicit in the recommended national-level actions, explicit attention must be paid to how we support rural clinicians to participate in leadership, not only locally in their small rural system, but also in representative roles across the health care system, so that we can be assured that health care policies and initiatives in medical education consider what success will be for rural and remote health care communities.

Robust rural clinical groups can be creative in their approaches to service and health care delivery and can be innovators on the margin of the system, nimbly undertaking small tests of change, and quickly responding to evolving local needs in a way that can serve communities remarkably well. Well supported, collaborative leadership in rural and remote environments can be deeply satisfying.

The stability of rural clinical groups, their ability to evolve positively and to advocate for the needs of rural communities beyond their own municipal boundaries will require greater attention both to supporting rural clinical leadership and to generous physician resource planning to support the women who will increasingly make up the rural physician work force. The health outcomes of rural and remote citizens in this country depend on it.

Acknowledgements

When our group of six clinicians joined the one remaining family physician in Marathon, the community had never had women physicians. There had been no female hospital CEO, there were no women practising in the adjacent communities. I am grateful for the women at a distance who took the time to mentor and encourage me, and I am grateful for both my male and female colleagues locally who created space for me to stretch into leadership roles. Truly, we are better together, and rural communities need us to continue to be better for them.

References

1.O'Reilly M. A Marathon session: a town's MDs develop a philosophy to call their own *CMAJ* 1998;158:1516-7
2.O'Reilly M. Medical recruitment in rural Canada: Marathon breaks the cycle. *CMAJ* 1997;156(11):1593-6.
3.Rural and northern physician group agreement. Toronto: Ontario Medical Association; 2006 and 2008. Available: **https://tinyurl.com/y9r9hva4**
4.Orrantia E. Marathon works: how to thrive in rural practice. *Can Fam Physician* 2005;51(9):1217-21. Available: **https://tinyurl.com/ycflczdg**
5.Bosco C, Oandasan I. Review of family medicine within rural and remote Canada: education, practice, and policy. Background paper. Mississauga, Ont.: College of Family Physicians of Canada, 2016. Available: **https://tinyurl.com/yd2sytnb**
6.Pitblado JR, Pong RW. Geographic distribution of physicians in Canada. Table 3.4. Ottawa: Health Canada; 1999. Available: **http://documents.cranhr.ca/pdf/distrib/GEOREPORT.pdf**
7.Summary report: physicians in Canada, 2015. Ottawa: Canadian Institute for Health Information; 2016. Available: **https://tinyurl.com/y8eattd4**
8.Number and percent distribution of physicians by specialty and sex, Canada 2015. Ottawa: Canadian Medical Association, 2015. Available: **https://tinyurl.com/yao5qceg**
9.A profile of rural family physician practices. Ottawa: Canadian Collaborative Centre for Physician Resources; 2012. Available: **https://tinyurl.com/yblnavjo**
10.Malko AV, Huckfeldt V. Physician shortage in Canada: a review of contributing factors. *Global J Health Sci* 2017;9(9):68-80.
11.Hana J, Rudebeck CE. Leadership in rural medicine: the organization on thin ice? *Scand J Prim Health Care* 2011;29(2):122-8. Available: **https://tinyurl.com/y8ol2zmc**
12.Van Aerde J, Dickson G. Accepting our responsibility: a blueprint for physician leadership in transforming Canada's health care system. Ottawa: Canadian Society of Physician Leaders, 2017. Available: **https://tinyurl.com/ybpjzou8**

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This article has been peer reviewed.

PERSPECTIVE

Challenge to change: diversity in leadership

by Constance LeBlanc, MD, and Christy Simpson, PhD

Society has long placed white men at the top of leadership hierarchies across all fields, and medical science is no exception. Although much progress has been made to advance diversity in these roles, gender parity remains a serious leadership challenge in academic medicine. Achieving equity is a complex cultural and organizational change that will require acknowledgement of the privilege, recognition of the diversity among women, mentorship and sponsorship for women, and strong role models. Greater diversity in leadership will provide benefit from enhanced decision-making, reduced rates of harassment, improved collegiality, more accessible role models for women, and increased productivity.

KEY WORDS: diversity, equity, academic leadership, women physicians, university

Setting the context

There is increasing attention to the need for diversity in leadership, both to better reflect the societies we serve and to gain the benefits that arise from diverse leadership.[1] Society has long placed white men at the top of leadership hierarchies across all fields and, although much progress has been made to advance diversity in these roles, this work is far from done. This is particularly true in science, technology, engineering, and medicine (STEM) and applies to both academic and clinical facets of medicine.[2,3]

Efforts to increase diversity in leadership roles have been directed toward both structural features (e.g., policies for recruitment and retention, opportunities for leadership development) and the ways in which unconscious bias affects who and what is privileged and, correspondingly, who or what is not. This complex cultural and organizational change also requires acknowledgement of the privilege that many of us in leadership roles do have and may take for granted. It is also important to acknowledge that many who have benefitted may experience the process of achieving equity as persecution, as initiatives related to diversity and inclusion are implemented.[4]

Although we are interested in supporting all aspects of diversity in leadership, in this article, we focus primarily on women. Despite the ubiquitous and longstanding presence of women in the workplace, the perspective that childbearing and childrearing are the main issues that impede or affect the ability of women to move into leadership roles persists. However, we know that gender equity is a far more complex issue; childbearing and childrearing alone fail to explain the small number of women in leadership roles in academic medicine. As well, the emphasis on childbearing and childrearing fails to explain the wage gaps,[5] the excessive criticism women receive when they fail as leaders, the exclusion of women from social networking opportunities other leaders have access to, institutional and professional community barriers, the lack of sponsorship for effectively naming women to leadership roles, or the fact that policies to date have not bridged these gaps fully or effectively.[5–8]

Women are not uniform. They are not all cis-gendered, married, with children, equally abled, white beings, and the intersectionality of these aspects creates, for some

women, further disadvantage and difficulty in attaining leadership roles.[9] Moreover, men are not a uniform category either, and further consideration about privilege and intersectionality will likely become increasingly relevant as subgroups of traditionally disadvantaged men lobby for their inclusion and equity in terms of leadership roles.

We also want to emphasize that, as women enter previously male-dominated STEM fields of study and workplaces, pre-existing and ongoing sexual harassment, even if ambient (an overall workplace culture and not targeted at a single person), is a significant barrier to advancement among both victims and female bystanders. Two key environmental factors that facilitate the expression of harassment in the workplace are male-dominated leadership and male-biased gender ratios.[24,25]

The incidence of harassment has held steady over the past three decades.[26] This abuse is a potent distractor with an inverse relationship to work satisfaction for white women; for multiple marginalized women, gender harassment is compounded by other forms of harassment. Harassment is an issue that arguably has not received sufficient attention to date.[27,28] How harassment affects decisions about moving into leadership roles and what happens when one is in a leadership role vis-à-vis harassment needs to be discussed and be part of how we move forward with initiatives to increase diversity in leadership.

What do we know? How does it apply?

Recent research has revealed three main reasons why women do not advance to top leadership roles despite their desire to move up: lack of role models, exclusion from informal social networks, and not having a sponsor in upper management to create opportunities.[10] As well, attributes typically associated with strong leaders are culturally masculine, which may create challenges for women (and some men) who have a different leadership style – in terms of lack of recognition of the strengths of these alternative leadership models and feeling that they have not "measured up" or met expectations.[11]

In Canada, only two of the 17 deans of medical schools are women, despite equal enrolment of women and men in medicine for decades.[12,13] As well, only 26% of university presidents in Canada are women.[14] These numbers demonstrate just how few role models there are for women who are interested in becoming

leaders. Girls grow up not seeing women in top leadership roles, which makes envisioning themselves in those roles or seeing this as a viable career path a challenge.[15]

Mentorship is undeniably key in providing women the necessary support and advice they need to navigate leadership with its ups, downs, and unique challenges. However, talent recognition and sponsorship are also required. Without strong endorsement of talent and character, women too often remain unrecognized.

Moreover, women are socialized to comply with rules and often do not consider applying for positions unless they meet 100% of the stated requirements, whereas men will apply with as few as 60% of the qualifications; thus, the climb to the top is potentially longer and more arduous for women.[9,12] This disparity also raises questions about how qualifications are being evaluated across candidates and how required versus preferred criteria for leadership roles may send signals about what is valued as core skills.

Sponsorship too is lacking for women. A strong sponsor can give junior to mid-range faculty members the opportunity to showcase their abilities, highlighting leadership skills to others based on talent, while also gaining valuable experience. Talent-based recruitment and promotion has advanced, yet network-based recruiting remains common.[16,17]

In our own faculty of medicine (Dalhousie University), the dean struck a Diversity in Leadership Task Force in January 2017. This provided an opportunity to discuss and reflect on leadership culture within the faculty, looking at our own statistics as well as related faculty and university policies and processes, which culminated in a report and recommendations.[1]

The task force also undertook a research study to examine the experiences of faculty members, with an initial focus on gender and leadership. The goal was to identify mechanisms for increasing the diversity of our leadership, which included consideration of relevant barriers and strategies for career development. The results (pending publication) highlighted, among other things, the importance of understanding one's local culture as a key factor in the attractiveness of and support for moving into leadership roles. Research participants, for example, discussed informal networks and perceptions of how these inform who is "selected" for key leadership roles. The research also reflected the above-identified broader conversations and concerns related to sponsorship/mentorship, policy implementation (including considerations related to childbearing and childrearing), and whether different leadership styles are acceptable and/or welcome.

Why do (and should) we care?

The positive impact of diversity in leadership is indisputable, and the evidence for this is overwhelming.[18-21] In sectors that are knowledge-centric, such as medicine and research, it is clear that diversity results in more creative thinking and innovation. Greater diversity in leadership provides benefit with respect to enhanced decision-making, reduced rates of harassment, improved collegiality, more accessible role models for women, and increased creativity and productivity in our work.[22,23,29] In other words, focusing on diversity generally, as well as diversity in leadership, is not only an opportunity to address the moral issue of equity and inclusion, but it is also essential for productivity, better science, enhanced problem-solving, and making better use of public resources in academia and health care.

Conclusion

Mentorship is undeniably key in providing women the necessary support and advice they need to navigate leadership with its ups, downs, and unique challenges. However, talent recognition and sponsorship are also required. Without strong endorsement of talent and character, women too often remain unrecognized.

Consider the following. How diverse is your leadership group? What criteria were used for

selection? Are a wide range of leadership styles and approaches embraced? Have these types of questions been discussed, and are there mechanisms in place to ensure diversity in leadership at your institution?

The need for diversity is not new. The skills and abilities of diverse leaders are not at issue; rather, dominant professional cultures need to demonstrate sustained, authentic commitment to change. Evidence shows that diversity will improve our outcomes, collaborations, and our bottom line. With this, we challenge all readers: what in the world are we waiting for?

Acknowledgements

We thank and recognize the other members of the Diversity in Leadership Research Group: Paula Cameron, Tanya MacLeod, Roger McLeod, Shawna O'Hearn, and Anna MacLeod. As well, we thank the Diversity in Leadership Task Force members, who are listed on the task force report.

References

1. Marshall J, O'Hearn S, McLeod R, LeBlanc C, al Shaibah A, Godin J, et al. Diversity in leadership: report with recommendations. Halifax: Dalhousie University; 2017. Available: **https://tinyurl.com/yckl2t8f**
2. Expert Panel on Women in University Research. Strengthening Canada's research capacity: the gender dimension. Ottawa: Council of Canadian Academies; 2012. Available: **https://tinyurl.com/ovd8gl9** (accessed 28 Feb. 2018).
3. Mascarenhas A, Moore JE, Tricco AC, Hamid J, Daly C, Bain J, et al. Perceptions and experiences of a gender gap at a Canadian research institute and potential strategies to mitigate this gap: a sequential mixed-methods study. *CMAJ Open* 2017;5(1):E144-51. doi: 10.9778/cmajo.20160114
4. Savran D. *Taking it like a man: white masculinity, masochism, and contemporary American culture*. Princeton, N.J.: Princeton University Press; 1998. 382 pp.
5. Payne E. Female professors paid less, promoted at a slower pace at University of Ottawa. *Ottawa Citizen* 2018;9 Jul. Available: **https://tinyurl.com/y7xpdqx4**
6. Hewlett SA, Buck Luce C, Servon LJ, Sherbin L. The Athena factor: reversing the brain drain in science, engineering, and technology. Research report. Boston: Harvard Business Review; 2008.
7. Denmark F. Psyche: from rocking the cradle to rocking the boat. *Am Psychol* 1980;35(12):1057-65. doi: 10.1037/0003-066X.35.12.1057
8. Bain O, Cummings W. Academe's glass ceiling: societal, professional-organizational, and institutional barriers to the career advancement of academic women. *Comp Educ Rev* 2000;44(4):493-514.
9. Mohr TS. Why women don't apply for jobs unless they're 100% qualified. *Harv Bus Rev* 2014:25 Aug. Available: **https://tinyurl.com/jo79dvu** (accessed 11 Jul. 2018).
10. Barsh J, Yee L. Unlocking the full potential of women at work. Toronto: McKinsey & Company; 2012. Available: **https://tinyurl.com/yaeawvxa** (accessed 11 Jul. 2018).
11. Kawakami C, White JB, Langer EJ. Mindful and masculine: freeing women leaders from the constraints of gender roles. *J Soc Issues* 2000;56(1):49-63. doi.org/10.1111/0022-4537.00151
12. Chiose S. More female leaders needed at Canadian universities, presidents say. *Globe and Mail* 2016;16 May. Available: **https://tinyurl.com/y7mxasqe** (accessed 11 Jul. 2018).
13. Canadian medical education statistics 2017. Volume 39. Ottawa: Association of Faculties of Medicine of Canada; 2017. Available: **https://tinyurl.com/y89eh7jy** (accessed 28 Feb. 2018).
14. Celebrating women university leaders and researchers. Ottawa: Universities Canada; 2018. Available: **https://tinyurl.com/ybnohe4e** (accessed 12 Jul. 2018).
15. Sandberg S. *Lean in: women, work, and the will to lead*. New York: Alfred A. Knopf; 2013.
16. Van den Brink M. Scouting for talent: appointment practices of women professors in academic medicine. *Soc Sci Med* 2011;72(12):2033-40. doi: 10.1016/j.socscimed.2011.04.016
17. Van den Brink M, Benschop Y. Gender in academic networking: the role of gatekeepers in professorial recruitment. *J Manag Stud* 2013;51(3):460-92. doi.org/10.1111/joms.12060
18. Dezsö CL, Ross DG. Does female representation in top management improve firm performance? A panel data investigation. *Strateg Manag J* 2012;33(9):1072-89.
19. Irwin N. Why more diversity on Wall Street might fight bubbles. *New York Times* 2014;17 Nov. Available: **https://tinyurl.com/yaphn5rx** (accessed 8 Jul. 2018).
20. Phillips KW. How diversity makes us smarter. *Scientific American* 2014;1 Oct. Available: **https://tinyurl.com/zo3asdr** (accessed 11 Jul. 2018).
21. Parrotta P, Pozzoli D, Pytlikova M. The nexus between labor diversity and firm's innovation. *J Popul Econ* 2014;27(2):303-64.
22. McCarty Kilian C, Hukai D, McCarty CE. Building diversity in the pipeline to corporate leadership. *J Manag Dev* 2005;24(2):155-68. doi.org/10.1108/02621710510579518
23. Arun S, Arun T. ICTs, gender and development: women in software production in Kerala. *J Int Dev* 2002;14(1):39-50.
24. Schneider KT, Pryor JB, Fitzgerald LF. Sexual harassment research in the United States. In Einarsen S, Hoel H, Zapf D (editors). *Bullying and harassment in the workplace*. 2nd ed. Boca Raton, Fla.: CRC Press; 2010. pp. 245-66.
25. Willness CR, Steel P, Lee K. A meta-analysis of the antecedents and consequences of workplace sexual harassment. *Pers Psychol* 2007;60(1):127-62.
26. Johnson PA, Widnall SE, Benya FF (editors). *Sexual harassment of women: climate, culture, and consequences in academic sciences, engineering, and medicine*. Washington, DC: National Academies Press; 2018 Available: **https://tinyurl.com/y99f4aco** (accessed 11 Jul. 2018).
27. Bergman ME, Drasgow F. Race as a moderator in a model of sexual harassment: an empirical test. J Occup Health Psychol 2003;8(2):131-45.
28. Berdahl JL, Moore C. Workplace harassment: double jeopardy for minority women. *J Appl Psychol*

2006;91(2):426-36.
29. Horwitz SK, Horwitz IB. The effects of team diversity on team outcomes: a meta-analytic review of team demography. *J Manag* 2007;33(6):987-1015. doi.org/10.1177/0149206307308587

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This article has been peer reviewed.

Diverse paths to leadership

As leaders in a faculty of medicine, one clinical and one academic, our paths to leadership have differed. Our backgrounds are distinct and yet our challenges and support in leadership are aligned.

Connie LeBlanc, MD

From a modest background with no medical exposure, I entered medical school at 19 years of age, prepared to work hard. However, I was ill-prepared for the nights of call and post-call days, some shifts over 36 hours, the various forms of harassment, and many other facets of the process. The harassment, studying in my second language, the evident affluence of my peers all saw me graduate stripped of some of the confidence and natural leadership skills I had previously developed.
Perhaps as a result of these experiences, I was surprised and excited as a new clinician to be asked to step into a leadership role by a mentor who saw talent invisible to me. My mentor supported me with careful measures of both clear direction and freedom. This sponsorship was essential; without it, I would never have applied, considered, aspired to, or had exposure to this exciting work.

Two decades later, I have worked on leadership skills: learning to stop and check, surround myself with diverse teams, engage in the challenge of meaningful and complex change, navigate conflict, strive to balance management and leadership, to move forward without leaving others behind.
I have moved into more senior positions over the years and enjoyed each challenge along the way.

Leadership is not an easy path: the work is hard, the critics many. But, like every job, if the rewards outweigh the difficulty, the balance is right. Do not think that I have arrived; leadership is not like that. There is no finish line, no winner; it is rather a matrix of points and lines in a complex system heading, hopefully, in a direction that will leave the world, or at least my small part of it, a better place.

Christy Simpson, PhD

As a bioethicist, trained in philosophy, my interest always lay in being able to make a contribution to health care in terms of supporting others (patients, families, health care providers, leaders) in addressing the difficult questions that arise. When I was hired by the Department of Bioethics, Faculty of Medicine, Dalhousie University, this meant I could contribute to both health care and academia. A wonderful mix.

Being in a small department meant that I considered being department head at some point. As it turned out, the opportunity arose much earlier than expected – during a time of turbulent change and accompanied by high expectations. Although I received much support from the dean and other faculty, this was a period of rapid transition in relationships, priorities, and uncertainty about what was to come. Did I belong at the head table? What qualifications did I have? To whom could I turn with questions, whether mundane or major? Could I trust the information I was given?

I realized fairly quickly that one has a default leadership style, and mine was heavily and helpfully influenced by growing up on a dairy farm where I observed my parents manage, direct, and work over the years with hired people with different backgrounds and expectations. I was also in charge when my parents were not around and as my capabilities grew.

Now, after seven years as department head, one of the things I appreciate most is the opportunity to contribute to decision-making at the faculty level. It is one of the best ways to influence what can work better for everyone.

OPINION

It's time to use proven methods to improve gender equity in medicine

by Gail Beck, MD

Women experience difficulties in being elected or appointed to leadership positions in medical organizations in Canada. Although methods exist to remedy this underrepresentation, the will to make the necessary changes has been lacking during my 45 years of experience with medical organizations.

The first time I held office of any kind in medicine was in my second year of medical school, when I was class representative to the McGill faculty of medicine for educational matters. I won an election to earn this position but, as I was often told, "It wasn't a hard election. Nobody wants that job." I suppose they meant that no one wanted the job other than the guy who ran against me, but I knew better than to make a sarcastic retort in those days.

In March 2018, the *Canadian Medical Association Journal* published a two-part series on women in medicine.[1,2] Although the articles looked at the current situation, the most startling finding was that the difficulties and concerns of women physicians were not new. The numbers of women studying and practising medicine have increased, but women physicians are still facing the same challenges when they seek leadership roles.

Rather than reviewing well-known statistics, I want to recommend a fundamental redesign of our equity programs in medicine. Do gender equity programs that are evidence-based and measure outcomes exist in academic medicine?

Bloomberg has developed an index to measure an organization's commitment to gender equality. This gender equality index (GEI) is based on a survey that quantitatively measures an organization's adoption of best practices in four areas: employee policies, workforce statistics, community engagement, and product offerings.[3]

The survey is comprehensive: 67 questions seek detailed information in each of the four topic areas.[4] Twenty-six questions ask for statistics: number of women on the board, percentage of the board composed of women, number of women in senior management. These numbers reveal the organization's willingness to hire, promote, and include women. Other parts of the survey look at policies, such as maternity and parental leave, that support gender equality in the workplace. The survey also includes items that measure an organization's support for women in the community and as suppliers and clients.

In 2017, 52 firms around the world took the survey. In a report on the results, Bloomberg published these highlights[5]:

- 24.2% of the firms have female representation on boards
- The percentage of female executives at these firms increased by 25.2% between fiscal year 2014 and 2015
- 73% require a gender-diverse slate of candidates for management roles
- 83% offer or sponsor financial education programs for women in their communities
- Nine track repayment rates by gender
- 75% provide return-to-work programs for women

These are the kinds of outcomes and measures that have a real impact of women's lives, and especially on their career advancement.

Not only could the GEI be adapted for health care institutions, such as hospitals and medical associations or faculties of medicine, but Bloomberg is also willing to assist by modifying the survey for particular circumstances.

A second program originates at the United Nations. UN Women has established seven "women's empowerment principles" (WEP) that organizations must adopt to promote gender equality[6]:

1. Establish high-level corporate leadership for gender equality
2. Treat all women and men fairly at work – respect and support human rights and nondiscrimination

3. Ensure the health, safety, and well-being of all women and men workers
4. Promote education, training, and professional development for women
5. Implement enterprise development, supply chain, and marketing practices that empower women
6. Promote equality through community initiatives and advocacy
7. Measure and publicly report on progress to achieve gender equality

Like Bloomberg, UN Women has created a tool – WEP gender gap analysis tool[7]– that can help organizations improve gender equality.

The work of Bloomberg and the UN Women's initiative demonstrate that there is no reason why medical organizations cannot become more proactive in supporting women physicians' advancement. Although the number of women in leadership roles in medicine has grown, it often seems as though the only reason for this is that the

number of women in medicine has increased. Some models for improving gender equity are more effective than those we have used so far. It is time to start using them and to prove to women physicians that medical organizations are committed to their advancement.

Activism for gender equity is not new, but, in my view, it has not been welcomed in medicine until very recently. Even as I write this, it strikes me that gender activism is still not really "welcomed," but rather it is accepted that there is a concern about the underrepresentation of women physicians in positions of influence and leadership.

While I have described some of the measures that can be taken to improve the appointment of women to leadership positions, I also want to comment on how difficult it can be for women to become elected to leadership roles. There is very little literature to help me examine this concern, but with respect to running for election, I do have experience to fall back on.

As recently as three years ago, I have been told that my gender and my specialty are drawbacks. I always remember a colleague saying, "You're a woman and a psychiatrist. That's two strikes." This was someone who was supporting me. When I considered running in a very public election, there was no one to counsel me that people would say extraordinary things to me and make quite unkind statements. I was aware that this occurred in traditional political arenas, but I naively believed that medicine was different. In fact, it was only my experience in more traditional political arenas that prepared me for the viciousness of medical politics. It would have helped to have support, such as that provided to women in politics by Equal Voice. Equal Voice describes itself as "a national, bilingual, multi-partisan organization dedicated to electing more women to all levels of political office in Canada.[8]

Like most people who run for office, I intend to improve some aspect of the world. It makes no sense to have a position for the sake of having it and not for what one can achieve. Determined to be respectful and gracious in discourse, I want to spend my energy working toward goals that I believe in, as I cannot work for causes I don't believe in. When I have been willing to walk away from a political situation because it no longer fit with my ideals, I have been told that I did not have the "persistence" required for politics. In my view, my work for many years for gender equity disproves this, and perhaps that type of statement indicates that gender equity has never been a particularly admired cause, unless you are a guy.

That we don't "persist" and that we "don't run" are reasons organizations give when they do not have enough women in elected positions. But if political parties mandate that they must recruit a certain number of women, why can't medical organizations?

Accountability is now widely accepted in corporate and academic endeavours, and, as has happened in some institutions, it is time for us to insist that organizations use the tools available to help change the gender balance among the ranks of their leaders. Medicine is falling behind and it will affect our influence in society not to give women their place at the table.

References

1.Glauser W. Medicine changing as women make up more of physician workforce. *CMAJ News* 2018;8 March. Available: **https://tinyurl.com/y7sc8qo2**
2.Glauser W. Rise of women in medicine not matched by leadership roles. *CMAJ News* 2018;26 March. Available: **https://tinyurl.com/ya8a2nbb**
3.Bloomberg gender-equality index shows progress below the c-suite. London: Bloomberg Professional Services; 2018. Available: **https://tinyurl.com/ycaw8cyx**
4.2019 gender-equality index survey. Bloomberg Professional Services; 2018. Available: **https://tinyurl.com/yb3t27z5**
5.Bloomberg financial services gender-equality index reveals global progress. New York: Bloomberg; 2017 **https://tinyurl.com/zm2zhfj**
6.The principles. New York: UN Women; 2018. Available: **http://www.weprinciples.org/**
7.The women's empowerment principles gender gap analysis tool. New York: United Nations Global Compact; 2018. Available: **https://weps-gapanalysis.org/**
8.About Equal Voice. Ottawa: Equal Voice; 2018. Available: **https://tinyurl.com/y7kqfw7x**

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This article has been peer reviewed.

Feminism and medicine

by Laura L. Calhoun, MD

The fight for women's equality in the western world dates back to the early 1830s when the suffragettes began demanding the right to vote. After the Second World War, a second wave of feminism brought about many societal changes. The current third wave is fighting for more nebulous goals. Women, themselves, medical organizations, and current medical leaders all have a role to play in recognizing, encouraging, and facilitating leadership among women.

KEY WORDS: equality, equity, physician leadership, feminism, gender balance

Feminism is the modern term for the underlying force that is driving the slow recognition that all women and men are equally valuable to society. The word feminism is relatively new and has supplanted suffrage and women's liberation over the past 100 years as the waves of fighting for equal value have rolled over the western world.

The fight for women's equality in the western world dates back to the early 1830s when the suffragettes began demanding the right to vote. Five Albertan women led by Judge Emily Murphy brought the "persons case" to the Supreme Court of Canada. The group, known as the Famous Five, included Irene Parlby, Henrietta Edwards, Nelly McClung, and Louise Crummy McKinley. The case was preceded by years of activism and, in 1927, the Supreme Court decided that women in Canada were persons and, therefore, had the right to vote. Provincially, the struggle was slower, with Inuit and First Nations women winning the right to vote only in 1961. In 2000, the Canadian government dedicated two statues to the Famous Five, one in Calgary and one in Ottawa, both called "Women Are Persons!"[1]

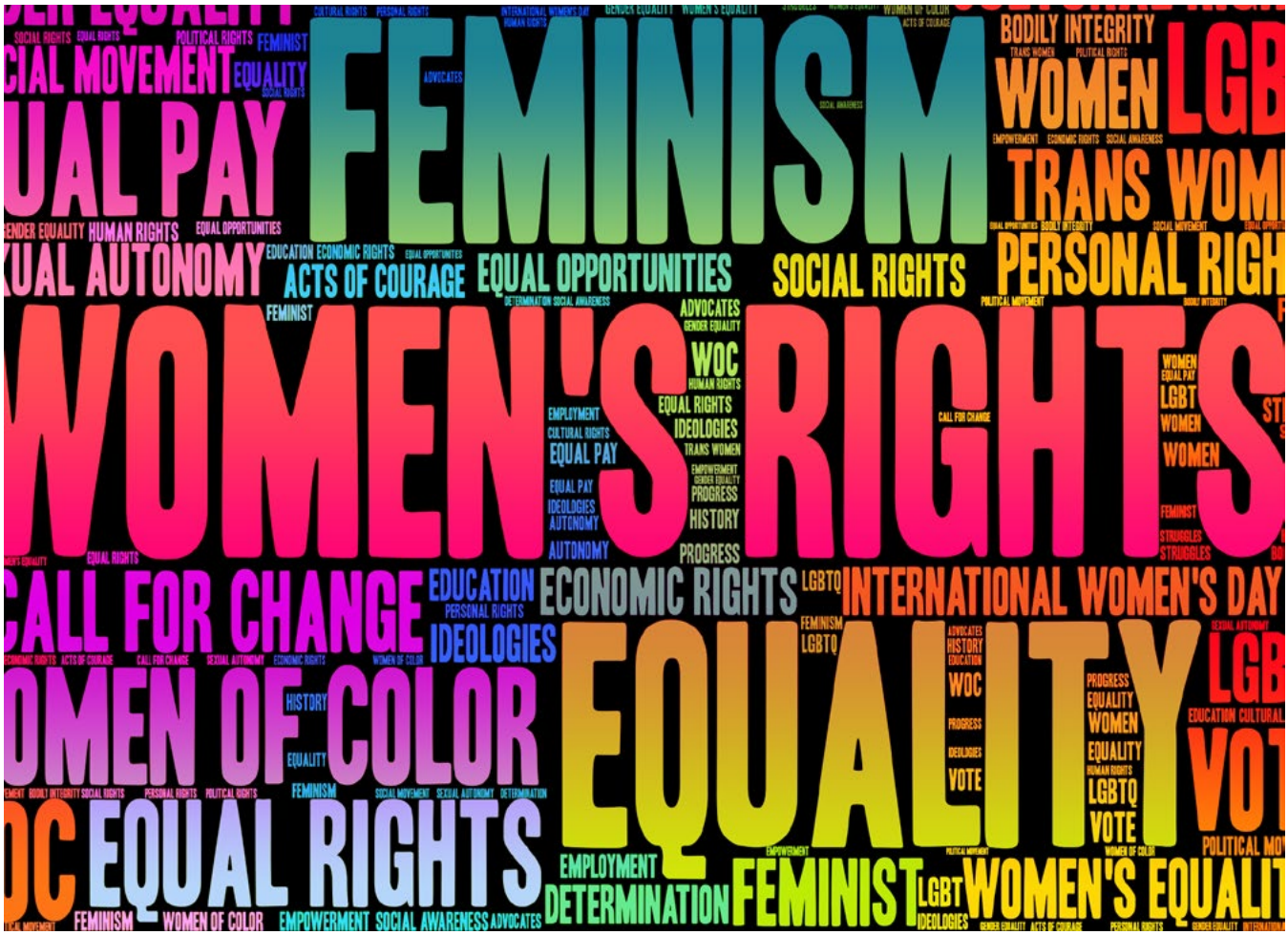
After the Second World War, many groups came together to fight for their civil rights, including women, African Americans, and the LGBT community. From the 1960s to the 80s, women were arguing for reproductive rights, the right to equal pay for equal work, the right to own property, the right to go to professional schools, the right to apply to any job, the right to charge their husbands with rape. This "second wave" of feminism is the one in which I, as a product of the Baby Boom, was first involved, although we did not call ourselves feminists then; we called what we were doing "women's liberation" or "women's lib."

"Women were generally unwelcome in professional programs; as one medical school dean declared, 'Hell yes, we have a quota.... We do keep women out, when we can.

As part of a women's lib group in the 70s and 80s, colleagues and I discussed and railed at differences in how men and women were treated, including my own experience in a pre-med biology class at the University of Alberta. All students were mandated to meet one-to-one with the male professor, who asked me, "If you get into medicine, how will that conflict with your duty to have children?" I can't recall what I said in return; I likely made something up to satisfy him, not knowing whether he had any sway over medical school admissions. Back in class, this certainly was a topic of discussion as we discovered that the men in the class had not been asked any questions about their "duty" to have children.

The Canadian Medical Association reports that, in 2017, 58% of first-year medical students were women.[2] This is in contrast to many years of quotas for women in professional schools.

"Women were generally unwelcome in professional



programs; as one medical school dean declared, 'Hell yes, we have a quota.... We do keep women out, when we can. We don't want them here' – and they don't want them elsewhere, either, whether or not they'll admit it."[3]

In 1970, the report of the Royal Commission on the Status of Women was tabled in parliament. [4] In 1971, a minister was appointed and a government ministry established in 1976.

The second wave of feminism led to many societal changes including the right for women to have an abortion, the right to divorce, and the right to hold men legally accountable for sexually assaulting their wives. There are numerous women's health initiatives, research into women's health, and women's health centres as a result of the work done by second-wave feminists.

The journey to equality has been of the two steps forward, one step back variety, with each wave of momentum leading to a backlash. After women were declared persons whose votes counted as equal to men's, the general worry was that women would begin demanding other rights of equality. As this did indeed occur, the concepts of "token female," "quotas for women," and "affirmative action" began to appear. Both the backlash to the first wave and the success of the second wave of feminism have had effects on women in medicine, the most visible being quotas on admissions giving way to equity of admission over time.

The backlash to the second wave in conjunction with feminisms' third wave is producing the current complexities in our society. Speculations regarding the reasons behind the current backlash are many and include:

- Women are not fighting for something concrete now – such as, the vote or the right to divorce – which makes the goal nebulous, more difficult to articulate and achieve in any linear fashion. Women today are fighting for gender equality, which doesn't mean

treating everyone the same, but rather treating people equitably so that everyone has an equal chance at success.

- There is a contradiction between "cool feminism" and actual feminism. Cool feminism shows up on T-shirts, coffee mugs, posters, and in the form of celebrities. It seems that if a female celebrity says "this is a feminist thing to do" then it is accepted as such. Actual feminism – the movement to tackle the cultural institutions where men are valued over women – is not cool. It scares people, as change always scares people.
- Feminism is more intersectional now, with the recognition that people are more than one identity at a time. Women can be transgendered, black, disabled feminists for example.[5-8]
- Women themselves – particularly white, heteronormative women of privilege – have been criticized for behaving just like men once they are inside the institutions they previously criticized. Women of other races and women who are not heteronormative observe that they have been left out of the feminist narrative altogether.[7]

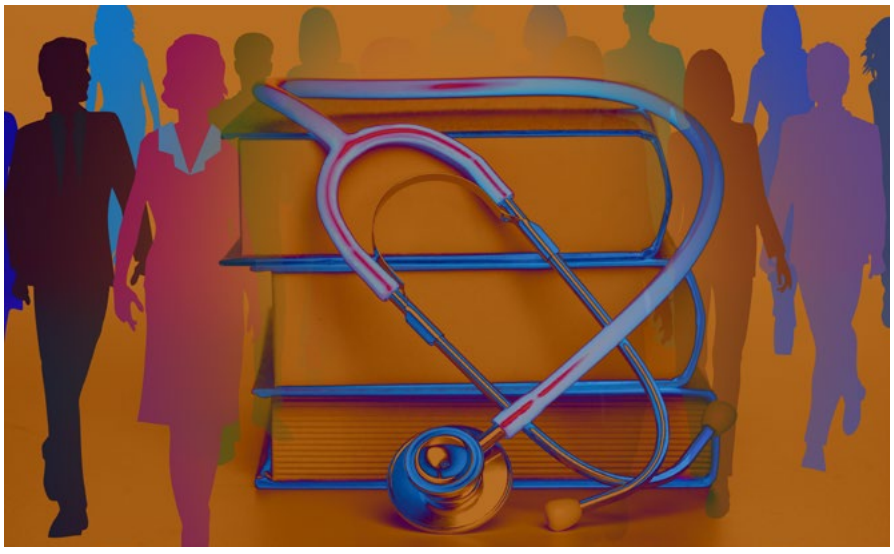
Inside the institutions of medicine today, both the wave of forward momentum and its backlash are visible. Although women are allowed at every level of medical hierarchy, they are not equally represented. Meritocracy is touted as the way things are done, and yet the numbers of medical women in positions of power does not provide evidence for the claim. White women of privilege are not equally represented in medical echelons, and there are even fewer women of minority groups.

"A similar situation is found in medical schools, where women comprise 50% or more of medical school graduates, but only 13–15% of department chairs in the USA and Canada."[12]

Crispin[6] argues that some women will not openly own up to being feminists for fear of making men uncomfortable. She states baldly that men's discomfort is not women's problem. She calls on men to self-examine their beliefs, feel the discomfort they have when they hear what other men do to women or say about women, and do their own work. "Do not ask women to reassure you that you are one of the good ones. This is manipulative." Men will have to feel uncomfortable if they are to break through all of the messages they have been indoctrinated with through their lives.

In contrast, using 2012 data from the Pew Research Centre, Pinker[9] makes the argument that the attitude toward women in America has changed since 1985. In that year, over 50% of Americans agreed with the statement "Women should return to their traditional roles in society" compared with 25% in 2012. And there is a steady downward trend in that thinking. In a fascinating chart, Pinker uses data from Google that show another downward trend since 2004: the number of searches for sexist, racist, and homophobic jokes. Pinker also makes the point that millennials value human equality more highly than any other generation, that people tend to carry their values with them throughout their life and so, by the time millennials are ruling the world, corporate boards and medical advisory committees will look a lot more balanced. At least in America.

Although Pinker's[9] book is reassuring that the world as a whole is headed in the right direction, it is equally clear



that misogyny still exists. In the democratic countries, the #metoo and #timesup movements have started to have an impact in the entertainment, educational, and corporate domains. Only 22.8% of all national parliamentarians were women in 2016[10]; 95.2% of Fortune 500 companies have male CEOs.[11] "Men are able to pursue a meaningful career without others questioning their familial love. Men have the power to voice their opinions in a direct manner without fear of dissent. Men have the ability to wear what they want without doubt or harassment."[5]

As the women who entered medical school in 2017 age, the demographics of physicians in general will change in Canada from the current balance of 38% women to more than half. And what of physician leaders? The topic of women leaders in Canadian health care is woefully under-researched; however, in one Ottawa study, although staff included 30% women physicians, only 13% of physician leaders were women.[12]

"A similar situation is found in medical schools, where women comprise 50% or more of medical school graduates, but only 13–15% of department chairs in the USA and Canada."[12]

In a rare Canadian research article into the underlying reasons women give for their exclusion from medical leadership, Virginia Roth and her colleagues[12] highlight three themes: individual factors; organizational factors; and leadership support, development, and systemic correctives.
This study suggests potential opportunities for action in all three areas.

- **Women**, individually, could work on their own mindsets about what it means to be a medical leader and adjust their self-concepts to recognize their own leadership potential.
- **Medical organizations** could take action in the selection and hiring of physician leaders through transparent and gender-equal or even female-biased selection committees. They could ensure leader role descriptions recognize the need for work–life balance, especially when leaders (men and women) are in their child-raising years.
- **Medical leaders** could use one-to-one time with their direct reports to assess both women's and men's strengths and interest in leadership, create more transparency regarding the roles leaders play, and coach or mentor those interested in moving forward regardless of gender.

By 2030, most working physicians in Canada will be women. It will be fascinating to see how the culture of medicine changes as we reach this tipping point. Many of these women will be aware of the fight for equity that has preceded them, and changes to the gender balance in physician leadership should ensue. Increasing our efforts at inclusion of marginalized women as well as white women over the next 10 years would stand us in good stead for the future.

References

1.Cavanaugh C. Famous Five. In *The Canadian encyclopedia*. Toronto: Historica Canada; 2015. Available: **https://tinyurl.com/y9jn5msy**
2.Basic physician facts. Ottawa: Canadian Medical Association; 2018. Available: **https://tinyurl.com/y7lno73m**
3.Collins G. *America's women: 400 years of dolls, drudges, helpmates, and heroines.* New York: HarperCollins; 2004.
4.Royal Commission on the Status of Women. Ottawa: Government of Canada; 2016. Available: **https://tinyurl.com/yct3jj4l**
5.Ethans P. Third wave feminism: what's the end game? Blog post. Paula vs Patriarchy 2018; 16 July. Available: **https://tinyurl.com/y7cfmok7**
6.Crispin J. *Why I am not a feminist: a feminist manifesto*. Brooklyn: First Melvin House Printing; 2017.
7.Gay R. *Bad feminist: essays*. New York: Harper Collins; 2014.
8.McRobbie A. *The aftermath of feminism: gender, culture and social change*. Thousand Oaks, Calif.: Sage Publications; 2009.
9.Pinker S. *Enlightenment now: the case for reason, science, humanism and progress*. New York: Penguin Random House; 2018.
10.Facts and figures: leadership and political participation. UN Women; 2018. Available: **https://tinyurl.com/md8eq6t**
11.Mejia Z. Just 24 female CEOs lead the companies on the 2018 Fortune 500 – fewer than last year. Englewood Cliff, N.J.: CNBC Make It; 2018. Available: **https://tinyurl.com/y8d92ngs**
12.Roth VR, Theriault A, Clement C, Worthington J. Women physicians as healthcare leaders: a qualitative study. *J Health Organ Manag* 2016;30(4):648-65. doi.org/10.1108/JHOM-09-2014-0164

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This article has been peer reviewed.

Unlocking the leadership potential of women in medicine

Virginia R. Roth, MD, Kathleen Gartke, MD, Jacqueline Parai, MD, Lara Khoury, MD

In medicine, as in many sectors, women are underrepresented as leaders. At The Ottawa Hospital, we found that many women exclude themselves from leadership because they perceive that the costs far outweigh the potential benefits. Under the guidance of a strategic committee composed of a diverse group of our women physicians, we developed and executed a strategy to identify potential leaders; mentor and train potential leaders; and recognize, enable, and support leaders. Key initiatives included formalizing the recognition of leadership activities and accomplishments as a performance metric, ensuring gender representation on leadership selection committees, developing a leave policy, enabling flexibility, and identifying and supporting intermediate female leaders. We solicited the active participation of our senior hospital executives, the Medical Advisory Committee, and department and division heads. Over six years, we have seen sustained progress. More new physician recruits are now women (including in specialties where women are traditionally underrepresented), a higher proportion of division heads are women, and many of our committee members have assumed formal leadership roles.

KEY WORDS: physician leadership, women, gender, career development, focus group, barriers

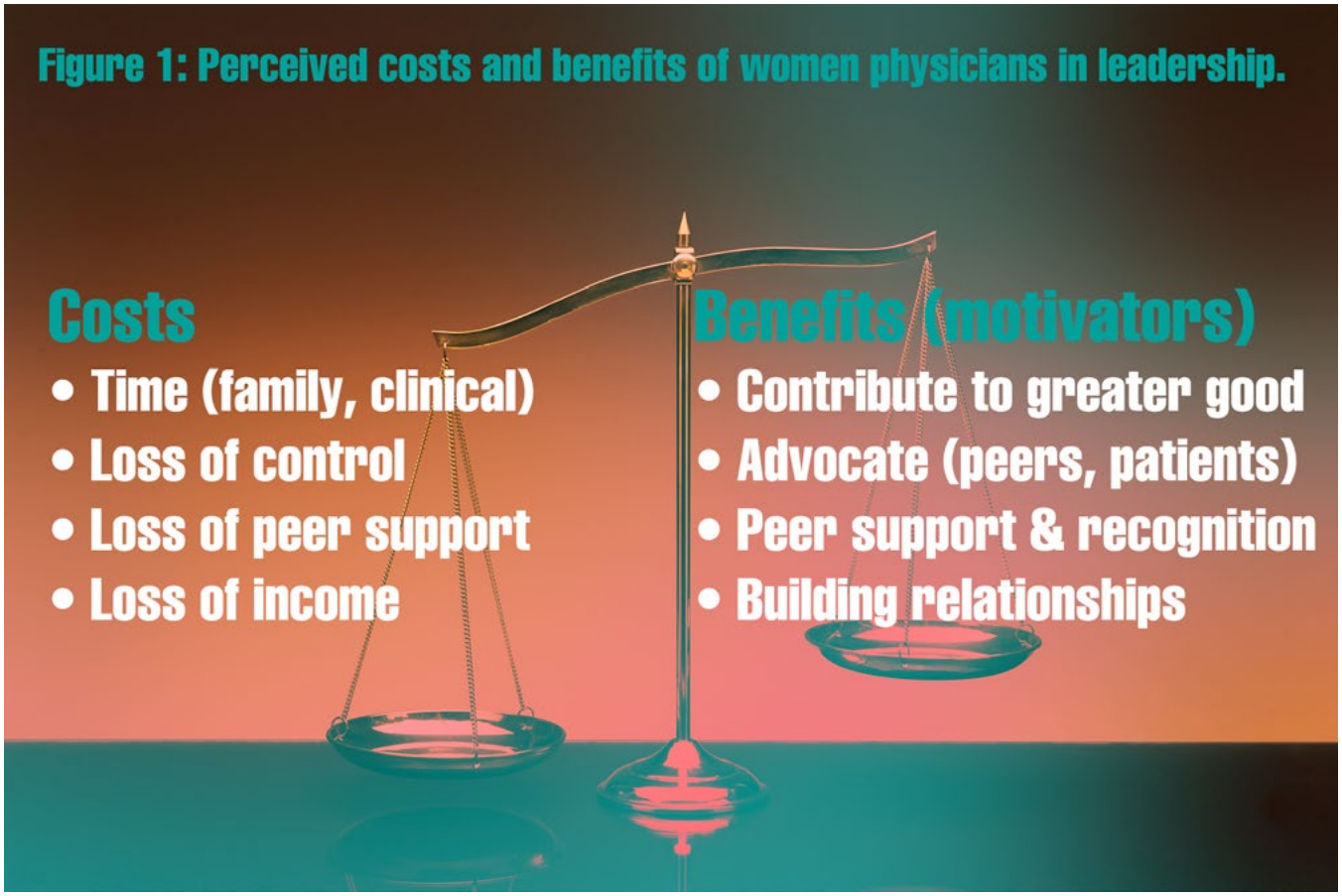
Now, more than ever, the Canadian health care system needs physicians who are willing to venture beyond their clinical responsibilities into leadership roles. Despite increasing demand for physician leaders and increasing numbers of women in medicine, there remains a significant gender gap in formal leadership roles.[1] The advantages of including women on leadership teams are well documented[2]; however, evidence-based guidelines and practical experience to address this gap are lacking in medicine.

With strong endorsement from the Senior Executive Team at The Ottawa Hospital (TOH), we established a strategic committee of a diverse group of women to learn what prevents women physicians from taking on leadership roles, engage them in identifying opportunities for change, and provide recommendations on how to increase the proportion of women physicians in leadership at our hospital.

Getting started

Our first step was to conduct focus group sessions with women physicians across a wide range of clinical specialties, age groups, and length of hospital appointments to better understand their experiences and perceptions.[3] Participants welcomed the opportunity to discuss the topic, to network, and to learn from others.

We discovered that the women physicians in our hospital are often unwilling to assume leadership roles because they believe the



sacrifices are too great and outweigh the benefits. From their perspective, the costs of taking on leadership roles were numerous. They felt that leaders are alienated, lack control over their time, are expected to be available 24/7 without reprieve, and are undervalued. Further, they felt that physicians assume leadership roles at the expense of their clinical practice, clinical income, autonomy as clinicians, and the respect of their colleagues.

Women who held formal leadership roles were more likely to identify the benefits of leadership. Among the strongest motivating factors were a sense of purpose, the ability to make a meaningful contribution, and the opportunity to build relations with leaders from other backgrounds and areas of expertise (Figure 1).

Our focus group participants identified subtle potential barriers to female physicians, including a system that rewards those who are more visible over those best qualified, a hesitancy to put themselves forward unless they are asked, fear of rejection, and a perception that their leadership pursuits may deprive others of the opportunity. In their experience, they did not feel excluded from leadership opportunities simply because they were women, but felt that impediments to leadership (e.g., time demands) are often generational rather than gender-related. At the same time, they readily identified important differences in social norms related to both domestic responsibilities and leadership behaviours. Although they welcomed proactive measures to support women physicians, they were strongly opposed to affirmative action. They want to be nominated for leadership because they are seen as capable candidates, not because they are women.

Exploring solutions

Focus group participants indicated that they would be more willing to consider leadership opportunities if there was increased transparency around the roles, qualifications, and expectations of these positions. They would welcome more formal leadership training, opportunities to learn more about various leadership roles,

networking events, and both male and female mentors. Finally, a tap on the shoulder is sometimes needed. Our women physicians felt empowered when approached and encouraged to take on leadership roles on the basis of their qualifications and abilities rather than their gender.

Focus group participants identified practical supports that would ease the pressures of leadership and make women more willing to step forward. These included parental leave policies, providing access to child care, more administrative support, and on-site office space. They indicated that departmental support is crucial to providing the clinical coverage that would allow them to attend leadership training and become more involved in leadership activities. Although protected time is often allocated for research activities in academic centres, leadership development is not perceived as a priority in many departments. Participants identified a need to make compensation more equitable for those who give up clinical time to shoulder leadership responsibilities and recommended formal recognition as a demonstration of support.

Designing a strategy

Armed with these essential insights gleaned from the focus group sessions, the TOH Female Physician Leadership Committee set out a strategic plan. This document was an ambitious manifesto and a call to action (Table 1). It laid out underlying principles and assumptions, an action plan, a timeline, and the most responsible persons. This list drew not only on the committee members, but also included other members of the senior management team, thus bringing them into the process and widening the base of support. The committee recognized immediately that the first step in increasing the number of women in leadership was to identify potential leaders. This needed to be followed by training and mentorship of these people, as well as recognition of the work they did.

What is the likelihood that selection committees will choose female applicants for formal leadership positions, if the committees themselves include few, if any, female members?

Identify potential leaders

The importance of leadership as a career path had to be more widely recognized. We expanded our annual physician performance review[4] to reflect this focus on leadership. Leadership goals and activities became an essential part of individual submissions and were reviewed by department and division heads during their annual interview. More widespread recognition of the importance and prominence of leadership was accomplished when it became a performance metric.

An obvious question arose. What is the likelihood that selection committees will choose female applicants for formal leadership positions, if the committees themselves include few, if any, female members? The Medical Advisory Committee agreed to accept "in principle" that there would be at least two women on every physician leadership selection committee. Their performance was tracked. Initially, they faltered, but a "statement of concern" from the committee seemed to spur renewed commitment.

The gender balance of every department and division's leadership selection committee continues to be monitored yearly by the committee. At this time, over three years of compliance has been followed by a change in TOH's medical staff bylaws that entrenches the concept that the gender balance of selection committees will reflect that of the medical staff.

The committee surveyed all department and division heads to identify, not only what positions of leadership were held by women, but also the actual identities of these women. This allowed leadership roles typically held by female physicians (e.g., residency program directors, clinical leads, undergraduate and postgraduate teaching leads, quality leads) to be recognized as intermediate leadership positions. It also allowed their department heads to formally recognize them as leaders and permitted specific targeting of these female physicians for advance notice of educational opportunities, annual leadership development courses, and networking events. The committee believes that these recognition and development opportunities

Table 1: The Ottawa Hospital's (TOH) female physician leadership strategic plan and key achievements.

Guiding principles

- TOH values diversity in leadership
- TOH is committed to investing in leadership development of physicians
- TOH recognizes the importance of family and community responsibilities and provides the flexibility to accommodate these responsibilities
- Leadership activities will be appropriately recognized and compensated commensurate with physician's time commitment

Identify potential leaders

- Incorporate leadership goals and activities into annual physician performance review
- Formalize leadership accomplishments as a performance metric
- Improve gender balance on leadership selection committees
- Identify intermediate leaders

Mentor and train potential leaders

- Develop formal and informal mentorship programs
- Identify female role models
- Provide formal leadership training

Recognize, enable, and support leaders

- Organize networking events
- Formalize a "leave policy"
- Enable flexibility through emergency child care options and technology
- Promote #GoSponsorHer campaign
- Recognize leadership accomplishments through awards and letters

will indirectly result in women physicians changing their perception of leadership and the importance of the contributions they are making.

Mentor and train potential leaders

The availability of mentorship for potential female leaders has been expanded. The Equity, Diversity and Gender Committee at the University of Ottawa's faculty of medicine has a well-established program that matches mentors with mentees following a detailed intake process to potentiate the match. Recently, a separate LGBTQ mentorship program has widened the possibilities. In addition, the Female Physician Leadership Committee established a "cup of coffee mentorship" program whereby female medical staff could be matched with mentees in a slightly more informal manner, centred around specific issues, such as child rearing, career stages, social issues, and others.

The importance of role models to potential leaders is well recognized. The TOH Leadership Development Institute's, half- or full-day programs of information and inspiration for all hospital leaders were made accessible to more physicians. Every member of the committee was invited to these sessions to allow them to be informed and to raise their level of comfort with hospital leadership activities. TOH also subsidizes tuition fees for certain leadership development courses. For the past several years, these resources have been distributed with a focus on gender balance, ensuring a proportionate number of women participate in leadership training and courses.

Recognize, enable, and support leaders

Our focus group participants identified a number of meaningful ways in which women physicians could be recognized, enabled, and supported to assume leadership roles. Yearly, and sometimes twice a year, networking events are held at the hospital as an opportunity for women to connect, share their stories, and explore prevalent attitudes toward, and challenges of, female leadership. Guest speakers have been invited from outside institutions, TED talks have been reviewed and discussed, and educational leaders have helped to direct an ongoing exploration of attitudes. Residents and medical students are included as important contributors to this culture change.

A lack of work flexibility, coupled with unclear expectations around leaves of absence, was identified by women physicians as an important barrier to leadership. Detailed surveys of all TOH department and division heads revealed no consistent policies for maternity, parental, or elder care leaves, few if any opportunities for shared or part-time work, and variable attitudes toward barriers that women might face in achieving leadership positions. This led to the development of the TOH medical leaves policy, aimed at shining a positive light on these necessities and encouraging equitable access to leaves. Hesitation to invoke these rights is fading slowly following a gradual cultural shift.

More recently, the committee assisted in coordinating emergency child care for staff and resident physicians (both male and female) through an outside private contractor. This service provides at-home care on short notice for physicians when their child is ill or when the child's usual caregiver is unavailable, assisting young physicians in the challenge of balancing family and work.

To further improve workplace flexibility, TOH declared an intent to establish a culture of enablement, investing in technology so that participation in important events was made possible through widespread use of teleconferencing and videoconferencing. Women, whose other life commitments had been limiting their attendance, are now able to participate much more widely.

In 2018, the committee joined the internationally recognized #GoSponsorHer social media campaign[5] as another way to highlight female physician leaders in the hospital. Each of the 12 department heads was challenged to sponsor a female physician in their department; larger departments could sponsor more than one. The sponsored physicians were announced over the course of the year in the hospital newsletter and through social media. At the end of the year, they were invited to attend a networking event that was dedicated to their sponsorship. They were also added to the list of recognized intermediate leaders. This encouraged department heads to actively recognize and

engage in the careers of women in their department.

We celebrate our leaders (female and male) to underscore the value of physician leadership at our hospital. A peer-nominated award is given annually to recognize an outstanding physician leader. Letters of appreciation encourage leadership activity at multiple levels. Recognition of the committee and advocacy for female physicians is ongoing through periodic updates to the hospital's Board of Governors and the Medical Advisory Committee.

Measuring progress

An early sign of progress was seen in our physician engagement scores, with an 11% increase in engagement for female physicians, compared with a 5% increase for male physicians, within 3 years of the establishment of the Female Physician Leadership Committee. With our focus on women in medicine, we have observed a steady increase year-over-year in the proportion of new physician recruits who are women. Women now comprise 37.8% of all active or associate medical staff at TOH, compared with 29.6% in 2011 before the establishment of the committee. The largest increases were seen in the Departments of Otolaryngology (15% increase), Surgery (10% increase), and Emergency Medicine (12% increase).

Over time, the number of women physicians in formal leadership positions at TOH has continued to increase. For example, 21% of all division heads are now women compared with 17% in 2011, although the number of female department heads remains the same (8% or 1 in 12). Nearly half of all members of the Female Physician Leadership Committee have assumed prominent leadership positions. Examples of roles include medical director of physician health and wellness, director of cancer research, deputy division head, senior medical officer, and chief of staff.

Summary

We did not find a single "golden key" to unlock the leadership potential of women in medicine. However, we focused on addressing the real and perceived barriers, while reinforcing the benefits of leadership, so that potential leaders do not opt out. Health care organizations looking to include more women physicians in leadership roles may benefit from our practical experience. Although we have not yet achieved equal representation in our hospital, we have sustained steady progress over six years by learning from, and working with, front-line clinicians to develop and execute a strategy to increase the number of female physician leaders.

References

1.Glauser W. Rise of women in medicine not matched by leadership roles. *CMAJ* 2018;190(15): E479-80. Available: http://www.cmaj.ca/content/190/15/E479 (accessed 18 June 2018).
2.Hunt V, Yee L, Prince S, Dixon-Fyle S. Delivering through diversity. Toronto: McKinsey & Company; 2018. Available: https://tinyurl.com/yafmt4nx (accessed 18 June 2018).
3.Roth VR, Theriault A, Clement C, Worthington J. Women physicians as healthcare leaders: a qualitative study. *J Health Organ Manag* 2016;30(4):648-65. doi: 10.1108/JHOM-09-2014-0164.
4.Garvin D, Worthington J, McGuire S, Burgetz S, Forster AJ, Gerin-Lajoie C, et al. Physician performance feedback in a Canadian academic center. *Leadersh Health Serv (Bradf Engl)* 2017;30(4):457-74. doi: 10.1108/LHS-08-2016-0037.
5.Join the #GoSponsorHer challenge today. Deloitte, Catalyst, McKinsey & Company; 2017. Available: http://gosponsorher.com/

Conflict of interest

The authors all confirm that they have no conflicts of interest or potential conflicts of interest to declare.

Author attestation

All authors contributed substantially to the content and editing of this manuscript and approved the final version. All authors have served terms as chair/co-chair of TOH's Female Physician Leadership Committee and led the implementation of key initiatives described in the article.

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This article has been peer reviewed.

How full is the glass? A perspective on women in medical leadership in Canada

by F. Gigi Osler, MD

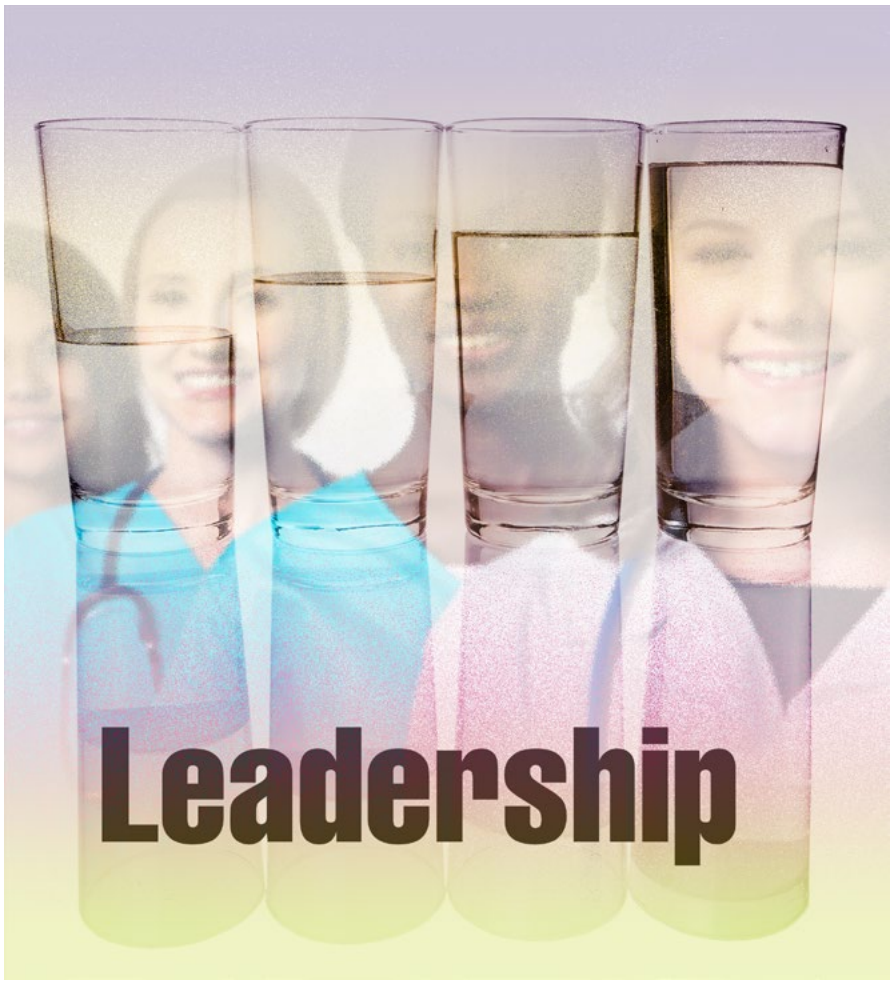
What do we really know about the representation of female physicians in medical leadership in Canada? Female representation on the current boards of the Canadian Medical Association and provincial/territorial medical associations is 23% and 40%, respectively. Identified barriers to female medical leadership include gendered organizational and workplace culture, gender bias, inflexible work practices, unequal childcare and domestic responsibilities, and biased performance assessment criteria and recruitment practices. Identified enablers include flexible tenure policies, systematic parental leave policies, greater inclusivity in the workplace, and formal mentorship structures. More has been written about the costs of leadership for female physicians rather than the benefits. Reinforcement of the positive aspects of leadership may serve as a motivator, particularly if the message is delivered by other female physician leaders. The negative consequences of the existing gender gap in medical leadership may have implications not only for physicians, but also for patients and the health care system. Further study on diversity and equity in medical leadership in Canada is needed to identify areas for improvement and ongoing work to address and correct gaps.

KEY WORDS: female physician leadership, barriers to leadership, enablers, benefits and costs of leadership, tracking women's leadership

"If you can't measure it, you can't improve it," or some variation thereof, is a frequently cited quotation of the late legendary management scholar, Peter Drucker. What do we really know about the representation of female physicians in medical leadership in Canada? What do we know about the barriers and enablers that female physicians experience in pursuing medical leadership positions? And what do we know about the benefits and costs to female physicians of taking on medical leadership positions? The short answer to all three questions is simply not enough. And if we are not measuring and tracking female physician leadership, how can we improve it or even recognize where it needs to improve?

How represented are female physicians in medical leadership in Canada?

Despite the lack of commonly accepted typology of medical leadership positions in Canada, I suggest three large categories: elected positions in organized medicine, clinical/administrative positions in hospitals, and faculty appointments in academic health sciences centres. Organized medicine includes the national medical organizations, national



specialty and special interest societies, and the provincial/territorial and local medical associations. In the absence of systematic data collection, I will review selected examples in each category based on data availability. Although there are hundreds of medical organizations in Canada, I only have ready access to current data for the Canadian Medical Association (CMA) and the provincial/territorial medical associations (PTMAs).

As of January 2018, 42% of the 84 260 practising physicians in Canada were women.[1] This percentage is projected to reach 50.1% in 2030.[2] The 42% figure will serve as the benchmark of comparison for each of the categories that follow.

Organized medicine

In August 2018, I was installed as the eighth female president of the CMA. I am also the first woman of colour and the first female surgeon to serve as CMA president. It took more than 100 years after the CMA was established in 1867 for the first female president, Dr. Bette Stephenson, to be installed in 1974. She went on to have a distinguished political career in the Ontario government and cabinet. Although eight female presidents might not seem like many over a 151-year history, I will be the fourth female CMA president in less than a decade; clearly the pace is picking up. The rapidly increasing number of women in the Canadian medical profession is a contributing factor. At the time of Dr. Stephenson's installation, just a fifth of the MD degrees awarded in Canada were received by female graduates; by 2017, this proportion had nearly tripled to reach 57%.[3]

A more robust indicator of the changing representation of female physicians in organized medicine leadership can be seen in the gender composition of CMA/PTMA boards of directors. Although female representation on the CMA board is just 23% of the 26 directors, as of June 2018, females represent 40% of the 179 physician directors serving on the PTMA boards. In New Brunswick and Newfoundland and Labrador, female physicians outnumber the male board members. This compares favourably with the 42% representation in the practising profession and highly favourably with the data for corporate Canada, which show that women occupied just 14% of board seats in 2017.[4]

This did not happen by accident. Since the 1990s, the CMA and the PTMAs have all drawn attention to the issue and promoted better representation of female physicians. In 1990, the CMA Board of Directors appointed an ad hoc Committee on Women's Issues, chaired by Dr. May Cohen from McMaster University. This became formalized as the Gender Issues Committee and met throughout the 1990s to advise the board. On the recommendation of this committee, the CMA

established a Leadership Workshop for Medical Women that was offered for several years. In 2001, Dr. Cohen became the inaugural recipient of the CMA's May Cohen Award for Women Mentors, which continues to be presented annually to a female physician mentor who has demonstrated outstanding leadership abilities in enhancing mentorship opportunities for female physicians.[5] In 2015, Joule's Physician Leadership Institute (PLI) began offering a two-day course: Leadership for Medical Women.[6] Female physicians are participating in leadership development and represented 48% of the physicians who enrolled in one or more of the PLI's offerings in 2017.

Aside from recognizing the importance of gender composition, the CMA/PTMAs have taken measures to encourage and facilitate the participation of female physicians in leadership positions. The New Brunswick Medical Society has adopted a specific intent to make its board and committee structure more reflective of the future composition of its membership and has made gender a specific consideration in its recruitment strategy. In an effort to promote inclusivity at its annual General Council meeting, the CMA began offering a child care subsidy for delegates (both female and male) several years ago and, at the 2018 meeting, welcomed breastfeeding in the plenary sessions and offered a wellness/breastfeeding room.

It would be useful to collect data on the representation of female physicians in elected and staff leadership positions across the full range of medical organizations in Canada at all levels. Prospective data collection is necessary to monitor the gender gap, follow trends, and formulate strategies.

Clinical/administrative roles in hospitals

No database in Canada captures information on the numerous leadership roles that physicians play in hospitals. Physicians occupy positions, such as clinical division head, committee member/chair, chief of staff, president/vice-president of the medical staff, and CEO, but numbers are not known. Most regionalized jurisdictions no longer have hospitals, per se, and it is not easy to find information about medical staff structures across the acute care facilities within a region.

Ontario still has hospitals with individual boards; the CEO, chief of staff, and the president and/or vice-president of the medical staff association are typically included as ex officio non-voting members of the board. The Ontario Hospital Association represents virtually all hospitals in Ontario and lists its hospital members on its website.[7] A review of the current gender composition of 133 hospital boards reveals that, of the 327 physicians serving in one of the abovementioned capacities, only 28% are female. Although this is double the representation of women on Canadian corporate boards, it still falls short of the reference point of 42%. Also, while 327 is a robust sample, it would be useful to round out the picture by being able to capture the full breadth of medical leadership roles in health facilities across Canada.

Faculties of medicine and dentistry

The underrepresentation of female physicians among the senior ranks of academic leadership is a longstanding issue. Gender-based data are not published systematically in Canada as they are in the United States by the Group on Women in Medicine and Science of the American Association of Medical Colleges (AAMC), which produces annual tabulations for a report: The State of Women in Academic Medicine. The most recent version, for 2015,[8] shows that the percentage of MD faculty who are women declines steadily with increasing rank, from 51% at the instructor level to 20% at the full professor level.

Statistics Canada's university and college academic staff system has a code to capture clinical full-time staff in faculties of medicine (including veterinary medicine) and dentistry. In 2016/17, women represented 50% of the faculty at the assistant, 41% at the associate, and 23% at the full professor levels.[9] This is similar to the findings from the United States. Again, it would be useful to be able to monitor trend data.

Summary

The underrepresentation of women in medical and health care leadership is a global phenomenon. The World Economic Forum has reported that while women constitute 61% of employment in health care worldwide, over 2007–2017, they accounted for less than 40% of

hiring in health care leadership positions.[10]

What are the barriers and enablers to seeking leadership positions?

Most of the literature on this topic has concentrated on female physicians in academic settings. Almost 30 years ago, Dr. Wendy Levinson and colleagues[11] reported on a survey of academic female physicians in the United States regarding their experiences of combining career and family life. Clearly, time management associated with juggling family and career responsibilities was a challenge, if not a barrier, to career advancement. Almost seven in 10 respondents reported that having children had slowed their career progress either markedly (12%) or somewhat (56%). Levinson et al. recommended strategies including flexible tenure policies, systematic maternity leave policies, and role models and mentors.

In 2016, Drs. Paula Rochon, Frank Davidoff, and Levinson[12] revisited this paper, asking "has anything changed in 25 years?" They noted the continued underrepresentation of female physicians in the senior ranks of academic medicine and recommended greater flexibility in structuring career paths and the use of metrics, such as those published by the AAMC.[8]

In 2018, Pattani et al.[13] published a survey of full-time faculty members at a large university department of medicine in Canada. Most participants were aware of the existing gender gap in academic medicine and described social exclusion, reinforced stereotypes, and unprofessional behaviours as consequences of this gap in terms of organizational effectiveness and culture. Suggested improvements included:

- better processes for recruitment, hiring, and promotion
- greater inclusivity in the work environment
- formal structures for mentorship
- ongoing monitoring of the gap

Female physicians take on a greater share of the responsibilities of raising children and maintaining a household. Although not current, the findings of the CMA's 2002 Physician Resource Questionnaire showed this very clearly.[14] Among physicians with children under age 18 at home, female physicians reported almost three times the number of hours a week with primary responsibility for children compared with male physicians (42.2 versus 15.0 hours). Female physicians also reported spending more than 1.5 times as many weekly hours maintaining the household as male physicians (12.5 versus 8.0 hours). Anecdotal evidence suggests that a gap still remains.

In conversations with other female physicians, some comment on having to choose between the "mommy track and the tenure track." A commentary on the Rochon et al.[12] paper concluded with the following: "we do not wish our sons and daughters to grow up believing that women have to follow a different career path than men because they have greater responsibilities at home. We want them to grow up thinking that men and women equally share both domestic and work responsibilities."[15]

Most recently Mangurian et al.[16] highlighted additional barriers beyond inflexible leave polices, including unconscious bias against female physicians and sexual harassment, which is gaining overdue attention through the #MeToo movement. They identify a number of policies and actions in the categories of:

- instituting family-friendly policies
- mitigating bias, discrimination, and sexual harassment
- improving mentorship, sponsorship, and targeted funding for women

...we cannot overlook the lack of women in medical leadership without considering the current status of racialized, disabled, LGBTQI physicians, and other underrepresented groups as well.

Costs and benefits

Based on a quick review of the literature, it would appear that more has been written about the costs of physician leadership than the benefits, in particular, the costs for female physicians. In a qualitative study of 35

female physicians at the Ottawa Hospital,[17] participants clearly assessed leadership as costly in terms of both time away from their personal and family lives and time away from clinical practice. Other concerns included being perceived as depriving others of leadership opportunities, having to get their colleagues to cover their absences while executing their leadership responsibilities, fear of rejection among those who self-identify for a leadership position, a perceived lack of respect for leadership by physician peers and a perceived lack of support by nursing leaders. As the authors summarized their results, "on the whole, participants perceived that to be a leader in their current work context would be burdensome and unrewarding."[17]

The negative consequences of the existing gender gap in medical leadership may have implications not only for physicians, but also for patients and the health care system. Implementation of gender equity strategies could benefit all physicians along with improving workplace culture and effectiveness.

I believe there is benefit in leadership and value in service. It would be useful to know how other physicians and medical leaders define the benefits of leadership. Reinforcement of the positive aspects of leadership may serve as a powerful motivator, particularly if the message is delivered by other female physician leaders. In 2015, the Royal College of Physicians and Surgeons of Canada renamed the original CanMEDS manager role to leader.[18] I look forward to seeing research around the measurement and acquisition of the competencies for the leader role and whether it subsequently affects the uptake of leadership opportunities by both female and male physicians alike.

Conclusion

It is heartening to see increased attention to improving equity, diversity, and inclusion in medical leadership across Canada. This commentary has approached the gender gap from a non-intersectional perspective, yet a key component in improving equity and diversity lies in taking an intersectional approach: we cannot overlook the lack of women in medical leadership without considering the current status of racialized, disabled, LGBTQI physicians, and other underrepresented groups as well. There is growing evidence to suggest that the interplay of these factors creates even greater barriers to career advancement and certainly warrants further discussion and exploration.[19]

In a *Toronto Star* commentary in September 2017 entitled "Canadian medicine has a diversity problem," Dr. Adam Kassam[20] illustrated his point about the health care system with the observation that, of the 39 federal health ministers since Health Canada was established in 1919, only nine have been women, one was First Nations, and one was from a visible minority. Medical school is the logical place to begin growing this diversity, and it is encouraging to see recent developments in the universities and medical faculties across Canada. In June 2017, the University of Manitoba Rady faculty of health sciences launched the Indigenous Institute of Health and Healing (Ongomiizwin) under the leadership of Indigenous physician, Dr. Marcia Anderson.[21] In 2016, the Admissions Review Committee of the faculty of medicine of Dalhousie University put forward recommendations to the dean intended to increase the number of African-Canadian and Indigenous medical students[22]; Dalhousie graduated six students of African descent in each of 2017 and 2018. The University of Toronto's faculty of medicine has appointed Dr. Lisa Robinson as chief diversity officer.[23] These measures will all contribute to a more diverse profession that is more fully representative of the patient population that we serve.

The negative consequences of the existing gender gap in medical leadership may have implications not only for physicians, but also for patients and the health care system. Implementation of gender equity strategies could benefit all physicians along with improving workplace culture and effectiveness. Furthermore, some studies have suggested that the gender gap may have implications for patient care and health outcomes.[24,25] Finally, the experience of the corporate world suggests that diversity would be beneficial for the health care system. As the federal

government's Advisory Council for Promoting Women on Boards reported, "studies in Canada, the United States, Australia and Europe demonstrate that businesses with more women on their boards and in senior management outperform those with fewer women."[26]

The CMA believes in a vibrant medical profession. With the increasing number of women entering medicine, we see the increasing need to encourage and support female physician leadership in Canada. It is needed, and now is the time.

References

1.Number of active physicians by age, sex and province/territory, Canada, 2018. Ottawa: Canadian Medical Association; 2018. https://tinyurl.com/y6vhy9cv (accessed 8 Aug. 2018).
2.Physician resource evaluation template. Unpublished. Ottawa: Canadian Medical Association; 2016.
3.Canadian medical education statistics. Table 29. Ottawa: Association of Faculties of Medicine of Canada; 2017. Available: https://tinyurl.com/yb3sotwc (accessed 8 Aug. 2018).
4.Regulators release new findings and trends on women on boards and in executive officer positions. Montréal: Canadian Securities Administrators; 2017. Available: https://tinyurl.com/yb7fmc9v (accessed 8 Aug. 2018).
5.May Cohen Award for Women Mentors. Ottawa: Canadian Medical Association; n.d. Available: https://tinyurl.com/ycogtk5y (accessed 8 Aug. 2018).
6.Leadership for medical women. Ottawa: Joule, Physician Leadership Institute; 2018. Available: https://tinyurl.com/y76wqtjk (accessed 8 Aug. 2018).
7.OHA members. Toronto: Ontario Hospital Association; n.d. Available: https://www.oha.com/membership/oha-members (accessed 8 Aug. 2018).
8.The state of women in academic medicine: the pipeline and pathways to leadership, 2015-2016. Table 4A. Washington: Association of American Medical Colleges; 2018. Available: https://www.aamc.org/members/gwims/statistics/ (accessed 8 Aug. 2018).
9.University and College Academic Staff System. Custom tabulation. Staff count by rank, gender and medical or dental appointment category, 2016/2017. Ottawa: Statistics Canada; 2017.
10.The global gender gap report 2017. Geneva: World Economic Forum; 2017. Available: https://tinyurl.com/ybufmzbs (accessed 9 Aug. 2018).
11.Levinson W, Tolle S, Lewis C. Women in academic medicine: combining career and family. *N Engl J Med* 1989;321:1511-7.
12.Rochon P, Davidoff F, Levinson W. Women in academic medicine: has anything changed in 25 years? *Acad Med* 2016;91(8):1053-6.
13.Pattani R, Marquez M, Dinyarian C, Sharma M, Bain J, Moore J, Straus S. The perceived organizational impact of the gender gap across a Canadian department of medicine and proposed strategies to combat it: a qualitative study. *BMC Med* 2018;16:48 https://doi.org/10.1186/s12916-018-1032-8.
14.Martin S. More hours, more tired, more to do: results from the CMA's 2002 Physician Resource questionnaire. Data Supplements. *CMAJ* 2002;167(5):521-2. Available: https://tinyurl.com/yaukway4 (accessed 8 Aug. 2018).
15.Anderson R, Brady AK, Aitken ML. Gender equality in academic medicine requires changes for both men and women. *Acad Med* 2017;92(8):1067. doi: 10.1097/ACM.0000000000001791
16.Mangurian C, Linos E, Sarkar U, Rodriguez C, Reshma J. What's holding women in medicine back from leadership. *Harv Bus Rev* 2018;19 June. Available: https://tinyurl.com/ycd6efrk
17.Roth V, Theriault, Clement C, Worthington J. Women physicians as healthcare leaders: a qualitative study. *J Health Organ Manage* 2016;30(4):648-665.
18.Frank J, Snell L, Sherbino J. CanMEDS 2015 physician competency framework. Ottawa: Royal College of Physicians and Surgeons of Canada; 2015. Available: https://tinyurl.com/j53ulbz (accessed 8 Aug. 2018).
19.Ginther DK, Kahn S, Schaffer WT. Gender, race/ethnicity, and National Institutes of Health R01 research awards: is there evidence of a double bind for women of color? *Acad Med* 2016;91(8):1098-107. doi: 10.1097/ACM.0000000000001278
20. Kassam A. Canadian medicine has a diversity problem. *The Star* 2017;3 Sept. Available: https://tinyurl.com/yavgmhsj
21.Mayes A. Indigenous institute to be launched with celebration, dialogue. Winnipeg: Rady Faculty of Health Sciences, University of Manitoba; 2017. Available: https://tinyurl.com/ydfzsd8c (accessed 8 Aug. 2018).
22.Recommendations to the dean, Faculty of Medicine. Halifax: Dalhousie University Admissions Review Committee; 2016. Available: https://tinyurl.com/yd9xzhzx (accessed 8 Aug. 2018).
23.Chief diversity officer. Toronto: University of Toronto, Faculty of Medicine; 2018. Available: https://tinyurl.com/y83nb9ab (accessed 8 Aug. 2018).
24.Tsugawa Y, Jena AB, Figueroa JF, Orav EJ, Blumenthal DM, Jha AK. Comparison of hospital mortality and readmission rates for medicare patients treated by male vs female physicians. *JAMA Intern Med* 2017;177(2):206-13. doi:10.1001/jamainternmed.2016.7875
25.Greenwood BN, Carnahan S, Huang L. Patient-physician gender concordance and increased mortality among female heart attack patients. *Proc Natl Acad Sci U.S.A.* 2018. https://doi.org/10.1073/pnas.1800097115
26.Good for business: a plan to promote the participation of more women on Canadian boards. Ottawa: Advisory Council for Promoting Women on Boards; 2014. Available: https://tinyurl.com/yc9dnwlt (accessed 8 Aug. 2018).

Acknowledgement

I thank Owen Adams, chief policy advisor at the Canadian Medical Association, for providing the data for this article and useful comments on the manuscript.

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This article has been peer reviewed.

Gender diversity in academic medical leadership: are we moving the needle?

by Megan Delisle, MD, and Debrah Wirtzfeld, MD

The gap between men and women in academic medical leadership is larger today than it has ever been, and we must all work together to effect the necessary change. In this article, we look at the promotion of diversity in Canadian medical schools, explore implicit biases, and offer practical suggestions to help Canadian health care organizations establish gender equity in leadership positions. Individuals, both men and women, have a role to play in ensuring gender diversity.

KEY WORDS: gender diversity, equity, equality, inclusion, women's leadership

Leadership is centred around a cohesive vision that inspires others to follow. We are not born leaders, and we do not become leaders just because we have an MD after our name. Leadership is developed with intention and through deliberate practice. Anyone can be a leader, even if they do not hold an official position or a formal title.

Leadership is not new to women. Some of the most important scientific discoveries were led by women, but men often received the acknowledgements and rewards, a phenomenon known as the Matilda effect.[1] For example, Rosalind Franklin made a major contribution to the discovery of the structure of DNA, for which Francis Crick and James Watson received the 1962 Nobel Prize. In 1903, Marie Curie was awarded the Nobel Prize with her husband for her work on the discovery of radioactivity, but she was only added as a recipient of the award because a committee member advocated the recognition of women in science. The reason women continue to have minority representation in the top leadership roles of almost all modern organizations is not because they do not possess the necessary leadership skills.[2] The reason is deeply rooted in complex systemic issues.

Why do we lack gender diversity in academic medical leadership?

The number of women in medicine has increased dramatically since the 1960s.[3] To many this is a sign that society has made progress toward diversity and inclusion; however, the presence of women in the upper echelons of medicine lags behind this trend. In fact, the gap between women's representation in medicine and their participation in top leadership positions is even greater today than it was a generation ago.

No one is to blame for the lack of diversity and inclusion of women in health care leadership. It is our innate instinct to surround ourselves with people who share similar psychological and physical traits. Human biologist, E.O. Wilson,[4] explains that, historically, our tribal behaviour is what kept us safe. It gave us a sense of belonging that drove us to perform altruistic acts for the tribe and put its members before ourselves. This tribal instinct has likely played a large role in succession planning in academic medical leadership, which was dominated by Caucasian men until the 1960s.[4] Humans are wired to feel uncomfortable when there is diversity, as this increases the risk of adversity resulting from differing values and beliefs. However, we cannot solve today's complex problems with the same thinking that got us here.

The current health care system is in dire shape, with high rates of preventable adverse events and wasteful medical expenditures.[5,6] Future innovations and progress in medicine will come from leaders who look at things differently and from a society that embraces these alternative views. If we do not intervene, it will take over

200 years for women to naturally migrate into positions of top leadership.[7] In this article, we discuss the benefits of and obstacles to including women in academic health care leadership, and we offer practical suggestions to help Canadian health care organizations establish gender equity in these positions.[8]

The benefits of gender diversity in leadership

Ample evidence demonstrates the benefits of leadership diversity and inclusion. For example, Catalyst, a leading global non-profit organization with a mission to improve the workplace for women, describes the four pillars on which gender diversity in business leadership can result in demonstrable improvements.[9] The first is *improved financial performance* as evidenced by companies with the greatest number of female board directors showing an average of a 26% greater return on investment than those with the lowest number of female directors.[9] Catalyst's second pillar is *more talent*, with female corporate leaders demonstrating better overall performance on 360-degree evaluations.[9]

It is tempting to believe that this means women have better leadership abilities, as concluded by Catalyst; however, it may also be related to the fact that only the top performing women are able to obtain leadership positions in today's organizations. This outperformance is a secondary effect of the higher standards to which all women are held.[10]

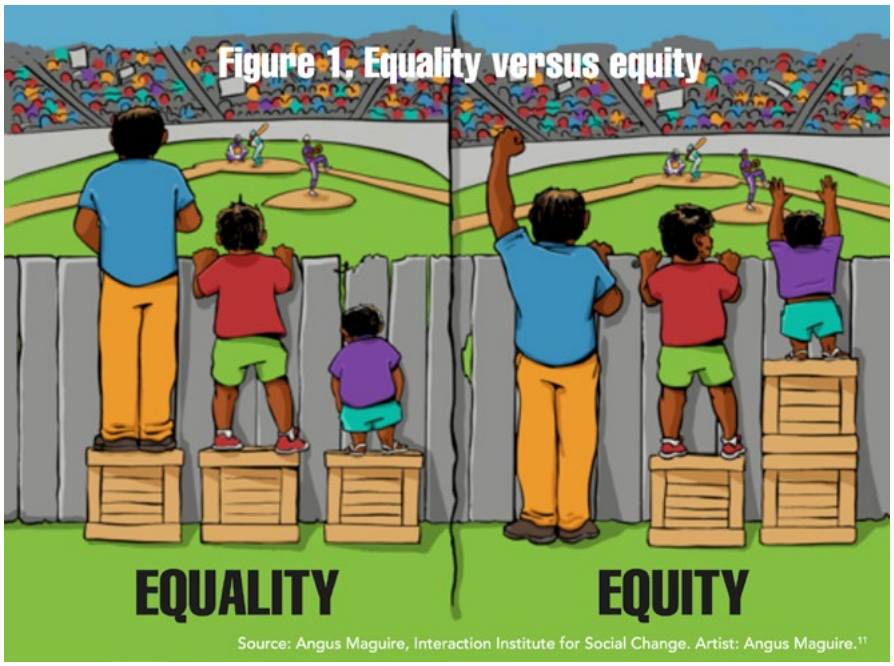


Figure 1. Equality versus equity

Source: Angus Maguire, Interaction Institute for Social Change. Artist: Angus Maguire.[11]

The third pillar is *improved employee, consumer, and investor commitment as well as increased social responsibility on behalf of the organization*.[9] The variety of perspectives found in more diverse organizations creates a safe space for self-expression and allows more consumers and investors to identify with the values of the organization. Companies that value gender diversity are considered forward thinking and acting in the best interests of their clients and employees. Some countries have even started to implement legal requirements for diversity.

The final pillar is *improved innovation and group performance* seen with increasing numbers of female leaders. This is believed to result from the more astute social sensitivity of women leading to improved internal dynamics and collective intelligence. Although there exists limited direct evidence demonstrating that these benefits of gender diversity in leadership will translate into similar benefits for the health care setting, there is no reason to believe that they would not.

The role of equity

There are no two words that look as similar, but represent such opposite ideas as "equality" and "equity." Equality is about giving everyone the same opportunities to be successful (i.e., the same starting line). In contrast, equity is about understanding what people need and providing this so that they might be successful (i.e., the same finish line). This does not necessarily mean that everyone will receive the same thing (Figure 1).[11]

Until now, equality has been our approach to improving leadership diversity in academic medicine. The hallmark features of this strategy include trying to make women more competitive in taking opportunities that have traditionally been awarded to

men: for example, through courses that develop negotiation skills and more assertive leadership styles.[12] It is natural for this to be our approach, as we are socialized to think good leaders are synonymous with the male gender schema: agentic, assertive, competitive.[13]

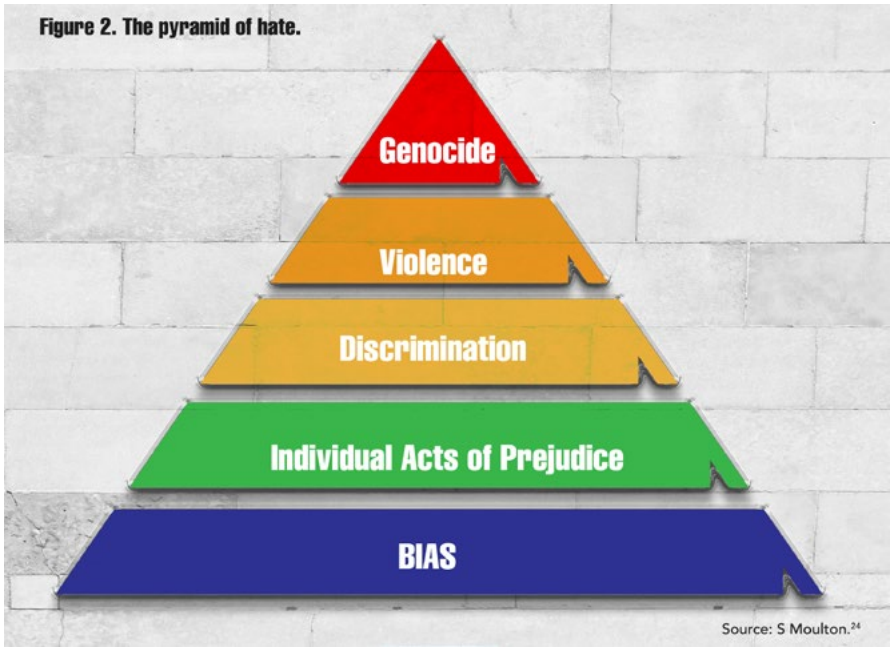
This approach tries to "fix" women, but teaching women to lead like men may actually set them back. For example, when they exert their newly learned skills, they violate the traditional gender schema they are held to – namely nurturant, sensitive, warm, and communal – resulting in negative labels, such as bossy or rude.[13] Although these leadership initiatives are well-intentioned, they do not support the necessary change in a sustainable manner. A better approach would be to encourage women to lead like women and support this by allowing the system to accept this different style using initiatives that foster equity.

The role of implicit bias

The foundation of any strategy to promote gender diversity in health care leadership has to start by addressing the deficits in our system through education. Educational practices must increase awareness of implicit, or unconscious, bias, which has been shown to be the root cause of the subtle discrimination that drives this cycle of Eurocentric, male-dominant leadership.[14]

For example, a test developed by a collaboration of psychologists at Harvard University, University of Virginia, and University of Washington quantitatively measures an individual's level of implicit gender bias to make them more aware of the role it may play in their actions and decisions.[15] Over 72% of Canadians who have taken the test have some degree of gender bias.[15] Among women, 70% report facing gender-specific bias in academic medicine and 30% report personally experiencing harassment compared with only 4% of men.[14] This seems like a high proportion, but studies have shown that only 20% of such experiences are reported, so this is likely only the tip of the iceberg.[16]

Figure 2. The pyramid of hate.



Implicit biases have serious negative consequences at the individual and societal levels.[17] For example, in a randomized double-blind study, Moss-Racusin et al.[18] demonstrated that science faculty rated the same application from two students, who were randomly assigned either a male or female name, differently. The male applicant was rated as significantly more competent and hireable than the identical female applicant.[18] Studies have also demonstrated similar mechanisms resulting in women being significantly less likely to get grants and promotions compared with their male colleagues.[19-21] Maternal bias, a more specific type of gender bias, results in physician mothers being perceived as having competing time demands and priorities that make them less ideal candidates for leadership positions.[22] Implicit bias has been shown to have at least as bad, if not worse, consequences in terms of individual well-being than the historical forms of more blatant discrimination.[14,23]

At the societal level, implicit bias is the first step toward and an important enabler of more dramatic acts, as conceptualized by the pyramid of hate (Figure 2).[24] If we do not intervene now, the prevalence of acts at the upper tiers of the pyramid will only become more prevalent. We need a zero-tolerance policy for these behaviours. The combination

of these negative experiences and male-normed assumptions about who can lead contribute to the higher rates of burnout and drop-out seen among women in medicine overall.[25,26] With all these obstacles to overcome and factors pushing women away from leadership positions, we see more clearly why only the top 1% can succeed in this environment.[27]

Achieving equity in academic medical leadership

Equity in health care leadership can be achieved through policies targeted at stopping the Matthew effect.[1] This term refers to the phenomenon, based on the Matilda effect, where a self-perpetuating cycle exists as men are more likely to get recognized leading to more opportunities for accomplishments.[1]

Policies must provide women with the resources and support they need to gain access to the same opportunities as men. These initiatives will require affirmative action through the implementation of best practices along the entire continuum of a medical career, starting with training, through to hiring, retention, and promotion, as it is not a single event that determines an individual's leadership potential.[27] Rather, it is the culmination of experiences over a lifetime that determines one's commitment to the medical profession and one's desire to lead.

Medical schools and residency programs

Medical school admissions currently have equal representation of men and women, but a "leaky pipeline" exists, as there is no longer an equal distribution in the upper tiers among academic medical leadership. A study by Roth et al.[28] found that female physicians feel that medical leadership would distract them from their personal and family responsibilities and believe that these are incompatible priorities. These women also view leadership recruitment processes to be unfair, lacking transparency, and highly politicized.

Women need to be socialized to believe that they can become leaders in academic medicine and that these positions are equally available to them. Mentorship is needed to support women in entering traditionally male-dominated leadership positions. This starts by encouraging men to feel comfortable mentoring women by educating them on their own implicit biases. Reference letters should be standardized to avoid generalizations based on preconceived notions of gender schemas.[29] These early career experiences are critical in influencing women's desire and ability to enter academic medical leadership positions later in their career trajectory.

Practising physicians and health care organizations

Diversity and inclusion must be incorporated into the hiring, retention, and promotion of individuals. These are the strategies that top businesses have successfully used to become leaders in diversity and inclusion, including Google, Facebook, Apple, Boston Consulting Group, and McKinsey & Company. The following are suggestions for the development of academic leadership potential in women.

1. Ensure the values of our health care organizations are consistent with diversity and inclusion

Companies can distinguish themselves and attract a larger pool of talented prospective employees by explicitly stating that diversity is a part of their vision, mission, and values. A strategic plan and publicly available, up-to-date reports detailing the existing diversity among employees at all ranks establishes transparency.[30] Better reporting systems are needed to allow people to speak up without fear of retaliation or stigmatization. One example is Callisto, a third-party, online system that reports perpetrators to participating organizations if they are subject of at least two complaints.[31] A commitment to diversity needs to be woven into every aspect of a health care system, starting at the top.

2. Establish a diversity committee

A diversity committee is necessary

to hold organizations accountable to their mission. Diversity should not be a tokenistic empty promise or an afterthought. Supporting and maintaining gender-equitable health care organizations is a full-time job, and the necessary resources should be allocated to it. An important role of a diversity committee is to provide implicit bias training, particularly to members of recruitment committees. American-based companies, such as Bias Interrupters for Managers, have been successfully employed by health care organizations for this specific purpose.[31] In May 2018, Starbucks closed all 8000 stores throughout the United States and Canada to provide employees with implicit bias training. The Government of Canada provides Canadian research chairs with a module on the role of implicit bias in the peer review process.[32] These are some examples that can be used to inspire the development of grassroots initiatives in Canadian health care organizations.

3. Blinded reviewing, standardized interviews, and objective promotions criteria

Among other inequities, women are assessed based on their accomplishments and men in terms of their potential.[33] Women are punished more harshly for their failures.[29] Recruitment teams have started to institute blinded hiring processes to overcome these imbalances. This can range from candidates being judged exclusively on their skills, based on a series of objective aptitude tests, anonymized résumés, and chat-room led interviews that employ voice-masking technology. It is also important for organizations to be transparent about the weight they will attribute to prespecified promotions criteria and to prioritize developing and promoting internally through talent development initiatives specifically for women.

4. Support through mentorship, sponsorship, and targeted opportunities for women

Mentorship is critical to the development of leadership skills, and sponsorship is necessary to enter into leadership positions. Women report difficulty finding mentors and are significantly less likely to receive sponsorship. Mentors provide advice and guidance whereas sponsors advocate for you in the workplace when you need to be more visible, such as being recommended as a panelist, to write an editorial, or to serve on an editorial board or a national committee.[34,35] Although mentors and sponsors serve different purposes, their end goal is the same: to support you in achieving your goals. The equity gap can be closed through formal mentorship programs and encouraging peer mentorship programs. Training sessions to ensure senior leadership members feel comfortable mentoring and sponsoring women should be available.

5. Transparent, objective compensation plans

Roth et al.[28] found that women do not perceive academic leadership to be worth the effort, that they perceive the sacrifice to be greater than the benefits. The gender pay gap may be contributing to these feelings, as women are paid as little as 46% of their male colleagues' salaries for the same job.[36] Objective compensation plans have been instituted at Oregon Health and Sciences University and the University of Alabama at Birmingham. These initiatives have helped bring women's salaries up to 72% of their male colleagues' salaries over the course of just a few years. Another strategy shown to reduce the gender pay gap includes annual salary reviews, successfully implemented by Columbia University and the University of California in San Francisco.[31] Better and equitable remuneration may help attract more women to demanding leadership positions.

6. Flexible and equitable family-friendly policies

The significantly higher rates of emotional exhaustion seen among women compared with men after having children must be addressed if we are to give women a chance at remaining competitive for top leadership positions.[37] At least 12 weeks of paid childbearing leave with an additional 4–12 weeks for new parents should be available to help address the physical and emotional needs of having a child.[31,38,39] These policies should be clear and not at the discretion of supervisors. There should be lactation rooms and protected time for breast milk pumping, such as relieving women for at least two 30-minute periods every eight hours. Increased breastfeeding has been shown to have a strong return on investment in terms of reduced sick leave and improved retention and productivity.[40] On-site childcare services and emergency back-up care for sick

Table 1. Diversity and inclusion programs in Canadian medical schools.

Medical school	Program	Lead	Mission and values	Strategic plan	Guidelines or policies	Diversity committee	Transparency in organizational processes
University of British Columbia	Equity committee	Minority man	Yes	No	Yes	Yes	No (coming soon)
University of Alberta	Assistant dean of Equity, Diversity and Inclusion	Woman	Yes	No	No	Yes	No
University of Calgary	Office of Professionalism, Equity, and Diversity	Woman	Yes	Yes	Yes	Yes	No (coming soon)
University of Saskatchewan	None	—	No	No	No	No	No
University of Manitoba	Diversity office	Not clear	Yes	No	No	No	No
Northern Ontario School of Medicine	Office of Equity and Quality	Woman	Yes	Yes	Yes	No	No
Western University	None	—	Yes	Yes	Yes	No	No
McMaster University	Chair, Diversity & Engagement of Undergraduate Medicine	Not clear	No	No	No	Yes	No
University of Toronto	Chief diversity officer	Woman	Yes	No	No	Yes	No
Queen's University	None	—	No	No	No	No	No
University of Ottawa	Office of Equity, Diversity and Gender Issues	Not clear	Yes	No	No	Yes	No
McGill University	Office of Social Accountability and Community Engagement	Minority man	Yes	No	Yes	Yes	No
Université de Montréal	None	—	No	No	No	No	No
Université de Sherbrook	Équité, diversité et inclusion	Woman	Yes	Yes	Yes	Yes	No
Université Laval	None	—	No	No	No	No	No
Dalhousie University	None	—	Yes	No	Yes	No	No
Memorial University	None	—	Yes	No	Yes	No	No

children at home are available at the University of California in San Francisco at a cost 10% below market rates.[31] Women are also more likely to have to care for their sick relatives, and paid catastrophic leave can help alleviate the stress associated with this societal duty.[31] Finally, women should not be penalized for deciding to teleconference into meetings. Efforts should be made to minimize the burden of evening meetings, allowing women to reclaim this time away from their families without penalty.

It is important to note that the focus of these six initiatives is mainly on increasing diversity. Progress in diversity is easier to measure than its counterpart, inclusion. Diversity is determined by the overt variability in things like gender, ethnicity, religion, sexual orientation, language, etc. Inclusion represents the actual behaviours that welcome and embrace the views these people bring, even if they do not represent mainstream beliefs and attitudes. As diversity becomes more commonplace, it is the hope that people will more readily accept and incorporate the new ways of thinking. However, the outcome is not guaranteed, and we must continuously ask ourselves if we are truly achieving inclusion rather than diversity alone.

What are we doing to promote diversity and inclusion in academic medicine in Canada?

A search using the words diversity and inclusion on the websites of the Association of Medical Faculties of Canada, the Royal College of Physicians and Surgeons of Canada, and the College of Family Physicians of Canada returns only one equity, diversity, and inclusion committee

with no information on its mission or ongoing projects.[41]
The 17 Canadian medical schools vary in what is currently being done to foster diversity and inclusion (Table 1). Most have a mission statement, policies, or an advisory committee. The focus on diversity is mostly at the undergraduate level, which may explain why we have seen such a dramatic shift in the demographic profile of medical school admissions resulting in equal distributions of men and women. However, there is clear evidence that this is not enough to achieve gender diversity in academic medical leadership because of the "leaky pipeline."[42]

Equal efforts are needed at the graduate level and in practice. The University of Ottawa's faculty of medicine deserves mention, as it the only medical school with diversity resources specifically targeted at leadership. For example, it provides training on unconscious bias for search committees as well as a mentoring program for women faculty. Diversity and inclusion initiatives need to be regulated through accreditation standards to ensure minimum standards.

Canada is significantly behind the United States with regard to strategies to improve leadership diversity in academic medicine. The Association of American Medical Colleges has an active diversity and inclusion program with diversity profiles available for the physician workforce (2014)[43] and medical education (2016).[44] It also has publicly available resources to guide the establishment of best practices for diversity and inclusion across institutions.

The American College of Healthcare Executives (ACHE) has produced several white papers addressing this topic and assessing the impact of strategies used to improve diversity and inclusion in health care leadership. In 2017, the ACHE launched the Institute for Diversity and Health Equity to meet the broader demands to increase leadership diversity and with the mandate of working with institutions to expand leadership opportunities for minorities and women.[45] Initiatives included under their umbrella are educational sessions on equity with the opportunity to obtain a certificate in Diversity in Health Management, bi-annual benchmark surveys assessing leadership diversity in health care, mentorship opportunities, and conferences. Equivalent initiatives are needed in Canada.

The role of the individual

Many of the strategies suggested above will take systemic efforts to successfully implement and will require a culture shift before we begin to reap the benefits. In the meantime, there are things that we can do as individuals to begin to make improvements. These will also serve as the "on ramp" to facilitate the bigger initiatives coming down the pipeline.

First, both men and women can find tactful ways of speaking up when we experience or observe inappropriate behaviour resulting from implicit bias. We can do this using real-time interventions as many of these offenses are unintentional. Examples include asking "what did you mean by that?" or "what you are saying/doing is making me uncomfortable."

Second, we can make sure credit is given to the women who deserve it, as their voices are often ignored. For example, President Obama's cabinet members were two-thirds men, and women often felt their ideas were being attributed to this dominant, more assertive group. They started to use a strategy called amplification, which involved repeating a key point made by a women and acknowledging the author to make sure they got credit.[46]

Third, we can make sure women are introduced and addressed by their professional titles. Studies have demonstrated that men are referred to as doctor 72% of the time and women only 49%.[47]

Finally, when women underestimate their potential and negotiate lower starting salaries, we can redirect them to a more suitable starting number.[48] These actions will help normalize equity initiatives and behaviours and contribute to a more fair work environment.

Men as allies

Finally, we have to make sure men are allies and equally a part of this movement to avoid inadvertent consequences and harm.[49] For example, campaigns, such as #MeToo, can result in gender-neglect as well-intentioned men become reluctant to mentor and sponsor women out of fear of being accused of mistreatment. Framing gender bias as a human rights issue rather than a women's issue will allow people to stand in solidarity.[50] It is not one single action that will result in gender diversity in leadership, but rather the energy that results from the work we do as a community, creating and generating new ideas and solutions, will begin to move the needle. Gender diversity in academic medical leadership will only be achieved if we work together.[51]

Conclusion

The gap between men and women in academic medical leadership is larger today than it has ever been, and we must all work together to effect the necessary change. We need to build on the evidence in other professions that demonstrates the benefits of gender diversity in health leadership to strengthen the support and motivation that is driving this change.

At the core of this movement is educating the health care workforce on the role of implicit bias and the need for access to *equitable* opportunities. We need to define what a gender-equitable organization looks like and who should be responsible for ensuring that a minimum standard is adhered to.

We can no longer believe that change will happen organically. Affirmative action will have to be undertaken to allow women to move into positions of influential leadership. Health care organizations must be held accountable and change must be visible. Finally, we need to remain cognizant of how we frame our efforts to ensure that we generate support and unity, not opposition and division, for this important initiative.

References

1.Merton RK. The Matthew effect in science: the reward and communication systems of science are considered. *Science* 1968;159(3810):56-63.
2.Cenac J. Five myths about women In leadership. *Forbes Community Voice* 2018;30 Jan:2-5.
3.Boulis AK, Jacobs JA. *The changing face of medicine: women doctors and the evolution of health care in America.* Ithaca, New York: ILR Press/Cornell University Press; 2008.
4.Wilson EO. Biologist E.O. Wilson on why humans, like ants, need a tribe. *Newsweek* 2012;2 April. Available: **https://tinyurl.com/ycdl9ljg** (accessed 19 May 2018).
5.James JT. A new, evidence-based estimate of patient harms associated with hospital care. *J Patient Saf* 2013;9(3):122-8.
6.Kelley B, Fabius R. A path to eliminating $3.6 trillion in wasteful healthcare spending. White paper. Ann Arbor, Mich.: Thomson Reuters; 2010. Available: **https://tinyurl.com/y8tr3mzx**
7.Schwab K, Samans R, Zahidi S, Leopold TA, Ratcheva V, Hausmann R, et al. The global gender gap report 2017. Geneva: World Economic Forum; 2017. Available: **https://tinyurl.com/ybufmzbs**
8.Fontenot T. Leading ladies: women in healthcare leadership. *Front Health Serv Manage* 2012;28(4):11-22.
9.Why diversity matters. New York: Catalyst Information Center; 2013. Available: **https://tinyurl.com/ybqqng32**
10.Walsh M. Their breakthrough formula: women CEOs. *Briefings Magazine* 2018;8 Feb. Available: **https://tinyurl.com/y8mmfn3e** (accessed 1 June 2018).
11.Maguire A. Illustrating equality vs equity. Boston: Interaction Institute for Social Change; 2016. Available: **https://tinyurl.com/j2tw3jd** (accessed 24 June 2018).
12.Frich JC, Brewster AL, Cherlin EJ, Bradley EH. Leadership development programs for physicians: a systematic review. *J Gen Intern Med* 2015;30(5):656-74.
13.Valian V. *Why so slow? The advancement of women.* Cambridge, Mass.: MIT Press; 1997.
14.Jagsi R, Griffith KA, Jones R, Perumalswami CR, Ubel P, Stewart A. Sexual harassment and discrimination experiences of academic medical faculty. *JAMA* 2016;315(19):2120-1. Available: **https://tinyurl.com/yd9r3lq8**
15.Implicit association test. Wichita, Ks.: IAT Corp; n.d. Available: **https://tinyurl.com/ycyx5wlx** (accessed 25 May 2018).
16.DeFilippis EM. Putting the "she" in doctor. *JAMA Intern Med* 2018;178(3):323-4.
17.Banaji M, Greenwald A. *Blind spot: hidden biases of good people.* New York: Delacort Press; 2013.
18.Moss-Racusin CA, Dovidio JF, Brescoll VL, Graham MJ, Handelsman J. Science faculty's subtle gender biases favor male students. *Proc Natl Acad Sci* 2012;109(41):16474-9.
19.Sarsons H. Interpreting signals in the labor market: evidence from medical referrals. Working paper. Boston: Harvard University; 2017. Available: **https://tinyurl.com/ychoh7m8**
20.Coleborn J. Mind the gender gap. *Clin Pharm* 2014;6(8):186. doi: 10.1211/CP.2014.20066743
21.Lewis D, Paulsen E (editors). Proceedings of the diversity and inclusion innovation forum:

unconscious bias in academic medicine. Washington: Association of American Medical Colleges; 2017. Available: https://tinyurl.com/y98r7ruv
22.Adesoye T, Mangurian C, Choo EK, Girgis C, Sabry-Elnaggar H, Linos E. Perceived discrimination experienced by physician mothers and desired workplace changes: a cross-sectional survey. *JAMA Intern Med* 2017;177(7):1033-6.
23.King E, Jones K. Why subtle bias is so often worse than blatant discrimination. *Harv Bus Rev* 2016;13 July. Available: https://tinyurl.com/l34vg5f (accessed 1 July 2018).
24.Moulton S. Pyramid of hate: definition & examples. Study.com; n.d. Available: https://tinyurl.com/y9vzu3qm (accessed 24 June 2018).
25.Jena AB, Khullar D, Ho O, Olenski A, Blumenthal DM. Sex differences in academic rank in US medical schools in 2014. *JAMA* 2015;314(11):1149-58. doi: 10.1001/jama.2015.10680
26.Dahlke AR, Johnson JK, Greenberg CC, Love R, Kreutzer L, Hewitt DB, et al. Gender differences in utilization of duty-hour regulations, aspects of burnout, and psychological well-being among general surgery residents in the United States. *Ann Surg* 2018;268(2):204-11.
27.Longman K, Daniels J, Lamm Bray D, Liddell W. How organizational culture shapes women's leadership experiences. *Adm Sci* 2018;8(2):8.
28.Roth VR, Theriault A, Clement C, Worthington J. Women physicians as healthcare leaders: a qualitative study. *J Health Organ Manag* 2016;30(4):648-65.
29.Malmström M, Johansson J, Wincent J. Gender stereotypes and venture support decisions: how governmental venture capitalists socially construct entrepreneurs' potential. *Entrep Theory Pract* 2017;41(5):833-60.
30.Silver JK, Cuccurullo SJ, Ambrose AF, Bhatnagar S, Bosques G, Fleming TK, et al. Association of Academic Physiatrists Women's Task Force report. *Am J Phys Med Rehabil* 2018;97(9):680-90. doi: 10.1097/PHM.0000000000000958
31.Mangurian C, Linos E, Sarkar U, Rodriguez C, Jagsi R. What's holding women in medicine back from leadership. *Harv Bus Rev* 2018; 19 June. Available: https://tinyurl.com/ycd6efrk (accessed 1 July 2018).
32.Unconscious bias training module. Ottawa: Government of Canada; 2018. Available: https://tinyurl.com/yacj5ao3 (accessed 25 June 2018).
33.Barnett RC, Rivers C. How the "new discrimination" is holding women back. Blog post. New York: Catalyst; 2014. Available: https://tinyurl.com/ybr4fx2g
34.DeCastro R, Griffith KA, Ubel PA, Stewart A, Jagsi R. Mentoring and the career satisfaction of male and female academic medical faculty. *Acad Med* 2014;89(2):301-11.
35.Patton EW, Griffith KA, Jones RD, Stewart A, Ubel PA, Jagsi R. Differences in mentor-mentee sponsorship in male vs female recipients of National Institutes of Health grants. *JAMA Intern Med* 2017;177(4):580-2.
36.Dotinga R. Objective compensation systems can eliminate gender pay gap. ACS Surgery News 2018;May. Available: https://tinyurl.com/y9ng5qry
37.Elmore LC, Jeffe DB, Jin L, Awad MM, Turnbull IR. National survey of burnout among US general surgery residents. *J Am Coll Surg* 2016;223(3):440-51.
38.Aitken Z, Garrett CC, Hewitt B, Keogh L, Hocking JS, Kavanagh AM. The maternal health outcomes of paid maternity leave: a systematic review. *Soc Sci Med* 2015;130:32-41.
39.Nandi A, Hajizadeh M, Harper S, Koski A, Strumpf EC, Heymann J. Increased duration of paid maternity leave lowers infant mortality in low- and middle-income countries: a quasi-experimental study. *PLoS Med* 2016;13(3):e1001985.
40.The business case for breastfeeding. Washington, DC: United States Department of Health and Human Services; 2008. Available: https://tinyurl.com/yadqdecj (accessed 25 June 2018).
41.Equity, Diversity and Gender. Ottawa: Association of Faculties of Medicine of Canada; 2018. Available: https://afmc.ca/node/167 (accessed 29 June 2018).
42.Greenberg CC. Association for Academic Surgery presidential address: sticky floors and glass ceilings. *J Surg Res* 2017;219(608):ix-xviii.
43.Diversity in the physician workforce: facts & figures 2014. Washington: Association of American Medical Colleges; 2017. Available: http://www.aamcdiversityfactsandfigures2016.org/
44.Diversity in medical education: AAMC facts and figures 2016. Washington: Association of American Medical Colleges; 2018. Available: http://www.aamcdiversityfactsandfigures2016.org/ (accessed 4 June 2018).
45.About the institute. Chicago: Institute for Diversity and Health Equity; 2017. Available: https://tinyurl.com/kg8fgl8 (accessed 4 June 2018).
46.Eilperin J. White House women want to be in the room where it happens. *Washington Post* 2016;13 Sept. Available: https://tinyurl.com/gtfgk56 (accessed 25 May 2018).
47.Files JA, Mayer AP, Ko MG, Friedrich P, Jenkins M, Bryan MJ, et al. Speaker introductions at internal medicine grand rounds: forms of address reveal gender bias. *J Womens Health* (Larchmt) 2017;26(5):413-9.
48.Hegewisch A, Liepmann H, Hayes J, Hartmann H. Separate and not equal? Gender segregation in the labor market and the gender wage gap. Washington, DC: Institute for Women's Policy Research; 2010.
49.Byerley JS. Mentoring in the era of #MeToo. *JAMA* 2018;319(12):1199-200.
50.Teaming up for safe spaces online! Stand together. New York: HeForShe; 2018. Available: http://www.heforshe.org/en (accessed 25 May 2018).
51.Fox C. *Stop fixing women: why building fairer workplaces is everybody's business*. Sydney, Australia: NewSouth Publishing; 2017.

Attestation

Both authors declare that they contributed substantially to this work, revised it critically, approved the final version, and agree to be accountable for all aspects of the work.

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This article has been peer reviewed.

Increasing the number of women in medical leadership: gender–discrepant perceptions about barriers and strategies

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To identify perceived barriers and strategies related to gender-inclusive medical leadership and to determine whether there are gender differences in these perceptions, we sent a 21-item, web-based survey to all active faculty members and trainees (residents and fellows) in a large academic pediatrics department. The overall response rate was 56.9% (156/274) with a 64.5% response rate for faculty (131/203). Respondents highlighted multiple barriers to women in leadership (family responsibilities, lack of guidance, implicit biases), as well as multiple strategies to address gender disparity (organizational changes, increased guidance, support for family responsibilities). We found significant gender-based differences: 61.7% of men reported that leadership opportunities for women and men were the same, whereas 62.6% of women reported women's opportunities were inferior; in terms of networking opportunities, 66% of men reported they were the same, whereas 65.9% of women reported they were inferior for women. More women than men cited organization-related challenges and strategies related to women in leadership; men selected more individual-related challenges and strategies. Men and women differ in their perception of the existence and causes of gender-related issues in high-level leadership and of the best approaches to improve gender diversity in leadership. These results may explain why gender disparity is ongoing, even in a pediatrics department where the majority of faculty are women.

KEY WORDS: diversity, gender equity, inclusiveness, perceptions, academic medicine, women leaders, university, strategies, challenges, barriers, gender gap, bias

Gender diversity in leadership increases productivity and innovation,[1-4] improves decision-making,[2,5] and increases engagement of team and organizational members,[3,6] all of which contribute to improved patient care and outcomes.[1,7] Despite these known benefits, disproportionately fewer women are promoted to full professor[8-14] in research tenure tracks[12] and in high-level medical leadership roles (e.g., department chair, division director) in most academic medical institutions in North America.[8,10,12,15-18] It is frequently

argued that the gender gap will close "naturally" over time because of the increasing numbers of women in medicine. However, even in pediatrics, where women have represented close to 50% or more of the faculty for the last 15 years,[19-21] women continue to hold significantly fewer leadership roles than men.[22,23]

In our Department of Pediatrics at McGill University, one of the largest in Canada, women represent 60% of the faculty, yet remain underrepresented in high-level roles. At the time of our study, only 26% of full professors, 33% of division directors, and 14% of associate chairs were women, and neither the vice-chair nor chair were women. Even 20 years ago, when potential leaders were starting their careers, pediatrics included about 40% women[21]; thus, these statistics still show a disproportionately low number of women.

Although studies describe gender differences in perception of personal barriers to leadership,[12,16,24,25] there is a paucity of literature examining gender-based perceptions of barriers and solutions regarding women in leadership. Therefore, the aim of this study was to identify such barriers and strategies and to determine whether men and women have different perceptions.

Methods

Study sample

Our study consisted of a department-wide survey in the Department of Pediatrics at McGill University. Survey invitees included 71 trainees (residents and fellows) of whom 73% were women and 203 clinical and PhD research faculty, i.e., assistant, associate, and full professors (60% women), who would be eligible for leadership positions in our department currently or in the future. In our department, trainees at all levels have leadership opportunities and were included to ensure generalizability of our results.

Survey

In line with our goal to study gender-based perceptions, we chose a survey design that allowed self-reported, anonymous responses. A 21-item structured survey was developed by the research team and included questions that were based on previous work,[5,24,26-29] but modified for our local context **(see appendix)**. Face validity was established with a broad spectrum of male and female department members at various leadership levels and academic ranks (including the trainee level).

The questions fell into three main domains: (1) demographics (e.g., gender, number of years since primary degree of appointment (i.e., years since obtaining the degree for which the respondent was appointed in the department), current academic rank, (2) personal leadership experience (e.g., personal importance of leadership, personally experienced barriers to leadership), and (3) general views on leadership (e.g., perceived challenges to women seeking leadership, perceived leadership and networking opportunities for women compared with men, perceived strategies to enable women to take on leadership positions). To maintain anonymity, leaders were defined as respondents who self-reported currently holding or having held a leadership position within the department, university, and/or nationally/internationally.

The web-based survey was sent to eligible departmental trainees and active faculty members using Lime Survey, an open-source tool. Email reminders were sent to invitees twice a week until there were no new responses for three consecutive days following a reminder. Digital data were stored in secure computer files. Data for cells smaller than three individuals were not reported to prevent identification of respondents. To encourage participation, respondents were eligible for a draw of two $25 gift certificates if they provided their contact information. Respondents' contact information was not stored with survey responses.

SPSS software was used to analyze the survey data, using independent *t* tests and χ^2 analyses as appropriate. A *p* value of 0.05 was taken as significant. In addition, we explored associations between key outcomes and relevant covariates using appropriate methods of logistic regression using Stata v. 12 (StataCorp, College Station, Texas). The key outcomes were: perception of leadership opportunities for women, importance of leadership roles, and perception of opportunities for informal networking. Multinomial, ordered, and logistic regression were used

to estimate odds ratios (OR), adjusted odds ratios (aOR) and their 95% confidence intervals (CI). Models were adjusted for respondent gender, number of years since primary degree of appointment (e.g., MD or PhD), current academic rank, and self-report of having held a leadership position.

Qualitative data, i.e., personal barriers to attaining leadership, perceived top three challenges to women seeking leadership, and perceived top three strategies to enable women to take on leadership positions, were also collected.

Ethics

Our University Health Centre Research Ethics Board reviewed the study and waived the need for Institutional Review Board approval. Informed consent was obtained from survey respondents to publish the study information.

Results

The survey remained open for 23 days. The overall response rate was 56.9% (156/274), representing a 64.5% response rate for faculty (131/203) and a 35.2% response rate for residents and fellows (25/71). Of the 156 respondents, 66% identified as female (n = 103) and 32% as male (n = 50), which paralleled the gender distribution of those invited to participate in the survey, i.e., 63.5% women and 36.5% men. The three remaining respondents were excluded from the results because their answers to the gender identity question created cells smaller than three. All except one of the 15 divisions in the department had both female and male faculty representation (one division's faculty are all female).

Table 1. Demographics of survey respondents.

Characteristic	**Women,** % (no.) except where noted	**Men,** % (no.) except where noted	Significance
Sex	66 (103)	32 (50)	
Median time since primary degree of appointment,* years [IQR]	18 [8, 26.5]	20 [9, 31]	$p = 0.21$
Median time since appointment in the Department of Pediatrics, years [IQR]	10 [3, 19]	18 [6, 25]	$p = 0.022$†
Current academic rank			
Trainee (resident/fellow)	72 (18)	28 (7)	
Assistant professor	74 (53)	26 (19)	
Associate professor	68 (28)	32 (13)	
Full professor	27 (4)	73 (11)	$\chi^2 = 15.18$, $p = 0.02$†
% total professional time spent in	$n = 91$	$n = 43$	
Administration	14.2	16.9	$t = 1.58$, $p = 0.12$
Clinical work	57.5	57.6	$t = 0.46$, $p = 0.65$
Education	13.0	9.8	$t = 1.54$, $p = 0.13$
Research	15.3	15.7	$t = 1.30$, $p = 0.20$
Currently holds or has held leadership position:			
Within the Department of Pediatrics			
Yes	35.0 (36)	62.0 (31)	
No	65.0 (67)	38.0 (19)	$\chi^2 = 11.58$, $p = 0.003$†
Within the university			
Yes	29.1 (30)	36.0 (18)	
No	70.9 (73)	64.0 (32)	$\chi^2 = 1.05$, $p = 0.59$
Nationally/internationally			
Yes	27.2 (28)	42.0 (21)	
No	72.8 (75)	58.0 (29)	$\chi^2 = 4.35$, $p = 0.11$

* No. years since obtaining the degree for which the respondent was appointed in the department (i.e., MD or PhD), used to approximate career level while maintaining respondent anonymity.
† Statistically significant, i.e., $p < 0.05$.

The median number of years since primary degree of appointment was similar for women (18 years, interquartile range [IQR] 8–26.5) and men (20 years, IQR 9–31, p = 0.21; Table 1). However, there was a significant difference between women and men in the median number of years since appointment in the Department of Pediatrics: women 10 years, IQR 3–19; men 18 years, IQR 6–25, p = 0.022; Table 1).

Of the survey respondents, women made up 72% of trainees (n = 18), 74% of assistant professors (n = 53), 68% of associate professors (n = 28), and 27% of full professors (n = 4), which approximated the departmental demographic trend, i.e., women accounted for 73% trainees, 67.2% of assistant professors, 57.7% associate professors and 26% full professors. Significantly more men than women were full professors (73%, n = 11 vs 27%, n = 4, $\chi^2 = 15.18$, $p = 0.02$) and who held leadership positions in the Department of Pediatrics (62.0%, $n = 31$ vs 35%, n = 36, $\chi^2 = 11.58$, $p = 0.003$) (Table 1).

There was no gender difference in the perceived importance of achieving a leadership position (median 4 on a scale of increasing importance, 1 to 5; $p = 0.34$, aOR 0.69, 95% CI 0.34–1.38; Table 2). However, there were significant gender differences in perceptions of the existence and causes of gender disparity in leadership. Significantly more women than men perceived leadership opportunities as inferior for women (62.6%, $n = 57$) whereas most men (61.7%, $n = 29$) perceived the opportunities as the same ($\chi^2 = 12.46$, $p = 0.01$, aOR 4.44, 95% CI 1.85–10.69; Table 2). Multivariate logistic regression did not reveal significant differences in the perception of leadership opportunities for the other variables tested, i.e., number of years since primary degree of appointment, current academic rank, and leadership role.

In addition, significantly more women than men (65.9%, $n = 60$ vs 34.0%, $n = 16$) perceived women's networking opportunities as different from those for men ($\chi^2 = 12.78$, $p = 0.002$, aOR 5.94, 95% CI 2.43–14.51; Table 2). Multivariate analyses revealed that respondents (women and men) who were leaders, as well as those who were trainees were more likely to perceive women's networking opportunities as different from those of men (aOR 3.74, 95% CI 1.52–9.20, OR 5.26, 95% CI 1.36–20.26, respectively; Table 2).

When asked about personally experienced barriers to attaining leadership, 41.2% of women ($n = 40$) and 22.4% of men ($n = 11$) affirmed such experience. There were no significant demographic differences between the men who reported barriers and those who did not. However, women who identified as leaders were more likely than non-leaders to report experiencing barriers (OR 5.09, 95% CI 2.04–12.7). When asked to choose from a list of barriers, these 11 men and 40 women reported experiencing the same top three: "not being identified and guided for leadership positions," "lack of mentors," and "family responsibilities" (Figure 1).

In contrast, there was gender disagreement related to perceived challenges for women in general and strategies for gender-inclusive leadership. When asked to select, from an itemized list, the top three challenges that women face when seeking leadership, more women than men chose organization-related issues, i.e., "not being identified or guided for leadership positions" (30.1% of women vs 16% of men), "non-shared leadership positions" (11.6% vs 2%), and "lack of leadership education and knowledge" (10.4% vs 2%) (Figure 2). In comparison, more men than women thought that women face individual-related challenges, such as "family responsibilities" (70.0% of men vs 55.3% of women), "concern over the position getting in the way of personal life" (32% vs 23.3%), and "difficulty getting on leadership track following parental/medical/personal leaves" (30% vs 7.8%). Similar gender discrepancies

Table 2. Survey responses.

Question	Women, median score [IQR] or % (*n*)	Men, median score [IQR] or % (*n*)	Significance	OR (95% CI)	Adjusted OR* (95% CI)
PERSONAL LEADERSHIP					
Independent of job title, peers view me as a leader 1 (strongly disagree) to 5 (strongly agree)	4 [3,4] (103)	4 [3,4] (50)	$p = 0.06$†		
Personal importance of achieving a leadership position 1 (not at all important) to 5 (very important)	4 [3,4] (97)	4 [3,4] (49)	$p = 0.34$†	0.74‡ (0.40–1.37)	0.74 (0.38–1.45)
CAREER DEVELOPMENT					
I have a clearly defined professional development plan 1 (strongly disagree) to 5 (strongly agree)	3 [2,4] (103)	3 [2,4] (50)	$p = 0.68$†		
Mentor and professional development plan (PDP)?					
No mentor or PDP	47.0 (48)	44.0 (22)	$\chi^2 = 6.18$ $p = 0.40$		
Mentor but no PDP	23.5 (24)	12.0 (6)			
PDP but no mentor	16.7 (17)	24.0 (12)			
PDP created with supervisor/mentor	5.9 (6)	14.0 (7)			
Other	6.9 (7)	6.0 (3)			
POTENTIAL BARRIERS					
Personally experienced barriers to attaining leadership positions?					
Yes	41.2 (40)	22.4 (11)	$\chi^2 = 5.24$ $p = 0.07$		
No	58.8 (57)	77.6 (38)			
Specifically avoided a leadership position?					
Yes	26.8 (26)	44.9 (22)	$\chi^2 = 6.38$ $p = 0.17$		
No	73.2 (71)	55.1 (27)			
Perception of leadership opportunities for women?					
Inferior	62.6 (57)	34.0 (16)	χ^2=12.46 $p = 0.01$¶	3.13§¶ (1.48–6.60)	4.44¶ (1.85–10.69)
Same	36.3 (33)	61.7 (29)			
Superior	1.1 (1)	4.3 (2)			
Perception of opportunities for informal networking for men and women?					
Same	34.1 (31)	66.0 (31)	χ^2=12.78 $p = 0.002$¶	3.75¶** (1.78–7.88)	5.94¶ (2.43–14.51)
Different	65.9 (60)	34.0 (16)			
Currently holds or has held a leadership position††					3.74¶ (1.52–9.20)
Resident/fellows					5.26¶ (1.36–20.26)
Satisfaction with work-life balance 1 (not at all) to 5 (satisfied/very satisfied)	4 [2,4] (97)	3 [2,5] (49)	$p = 0.63$†		
My professional opportunities are 1 (completely limited) to 7 (completely unlimited)	4 [2,5] (97)	4 [2,5] (49)	$p = 0.96$†		
The Department of Pediatrics recognizes and rewards strong leadership 1 (strongly disagree) to 5 (strongly agree)	3 [3,4] (87)	3 [3,4] (41)	$p = 0.72$†		

Note: CI = confidence interval, IQR = interquartile range, OR = odds ratio.
*Models were adjusted for gender, number of years since primary degree of appointment, current academic rank (resident/fellow, assistant professor, associate professor, full professor), and holds/has held a leadership position (departmental, university, national/international).
†Wilcoxon rank-sum (Mann-Whitney) test.
‡ Ordinal logistic regression comparing women to men (odds of rating a higher importance).
§ Multinomial logistic regression comparing women to men (OR is for choosing inferior compared to same).
¶ Statistically significant.
**Logistic regression comparing women to men (OR is for choosing different over same).
†† Comparison is adjusted for gender and compares holds/has held a leadership position versus does not hold/has not held a leadership position.

were observed when participants were asked to choose the top three strategies that would enable women to seek leadership positions (Figure 3). Although over 30% of both women and men selected "mentorship," women chose additional organization-related strategies more than men: "better/more administrative support" (44.7% of women vs 30.0% of men), "support network" (28.2% vs 20.0%), and "flexible hours" (25.0% vs 14%). In contrast, more men than women chose strategies related to the individual, such as "developing personal effectiveness" (36% of men vs 19.4% of women) and "daycare on-site" (28.0% vs 12.6%).

Discussion

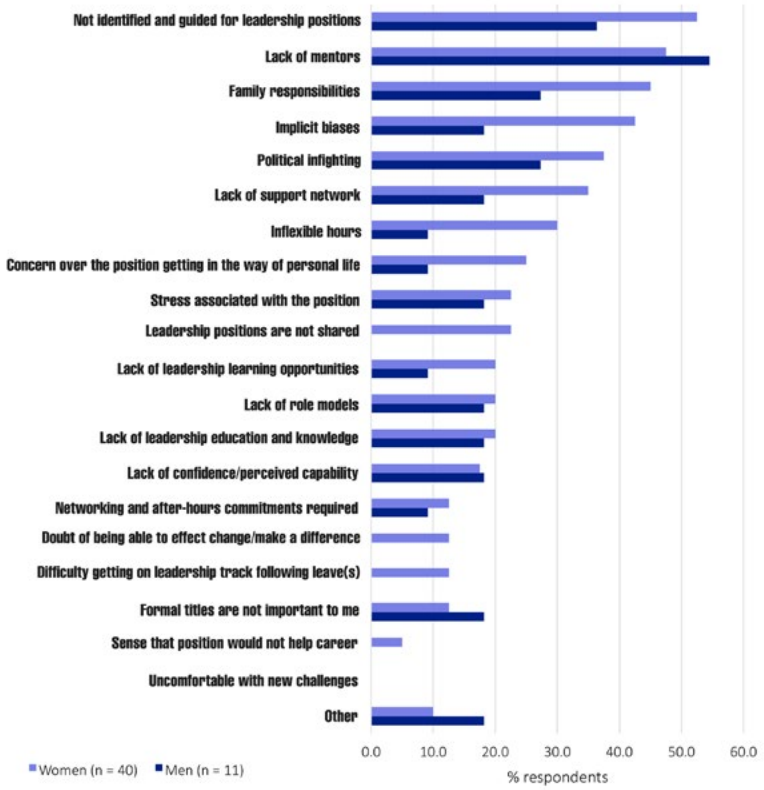
Through this department-wide survey, we found important differences between men's and women's perceptions of the existence and causes of gender-related issues in medical leadership and best approaches to improve gender diversity in medical leadership. These findings are novel and will contribute to innovative approaches to achieving gender-inclusive leadership.

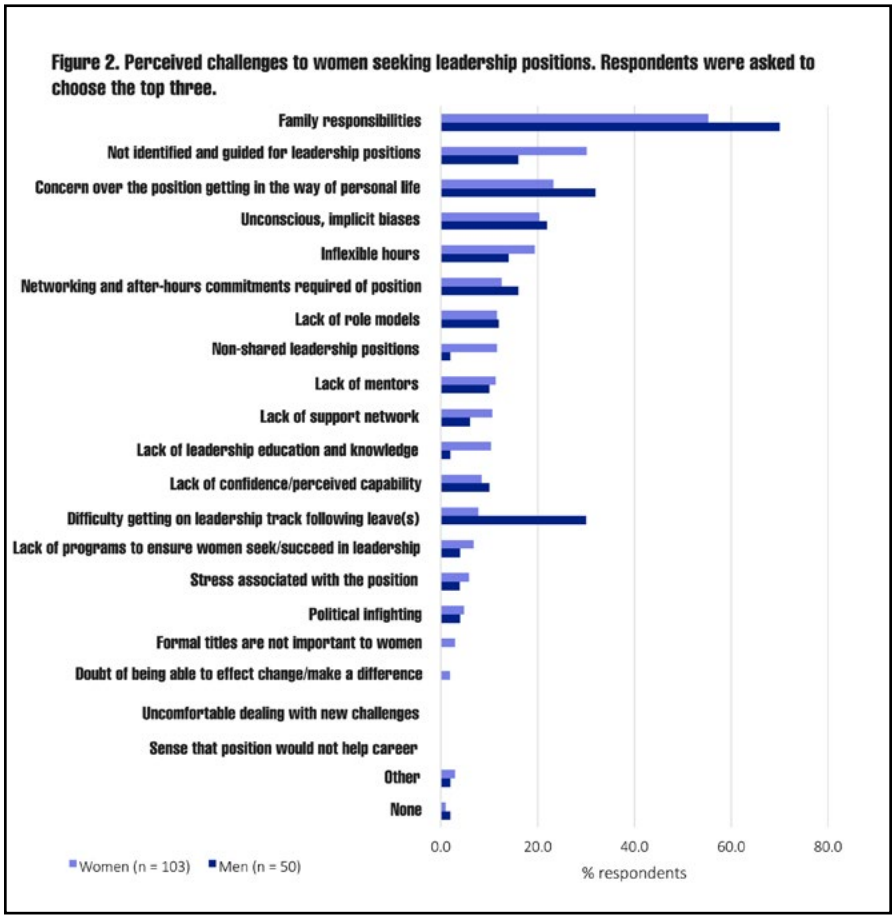
As expected, significantly more men were full professors and leaders; however, this gender discrepancy was not a result of motivation, as there was no difference between men and women in terms of the personal importance of achieving a leadership position. Most of the men in our study perceived that leadership and networking opportunities (important for career advancement) are the same for men and women, which highlights a disconnect from most of the women who perceived inferior leadership opportunities and different networking opportunities, as also noted in the literature.[5,10,11,30,31] These gender-discrepant perceptions represent major barriers in and of themselves, given that most of those currently holding leadership positions and, thus, responsible for departmental changes and advocacy are men, who may be unaware of the obstacles women experience.

Our results also demonstrate gender disagreement related to perceived challenges and strategies to enable women to attain leadership positions within our department. The leadership barriers most frequently selected by men and women (Figure 2) are consistent with those emphasized in the literature including: lack of guidance through mentorship and networking,[11,29,30] disproportionate caregiving responsibilities for women,[11,13,31-33] lack of a family-friendly work environment,[5,25,31] and gender-biased selection of leaders.[5,34]

Although men viewed women's main challenges as individual-related, most of the 11 men who personally experienced barriers to leadership, reported organization-based barriers, as did the 40 women who experienced barriers

Figure 1. Personally experienced barriers to attaining a leadership position. Respondents were asked to select all that apply.





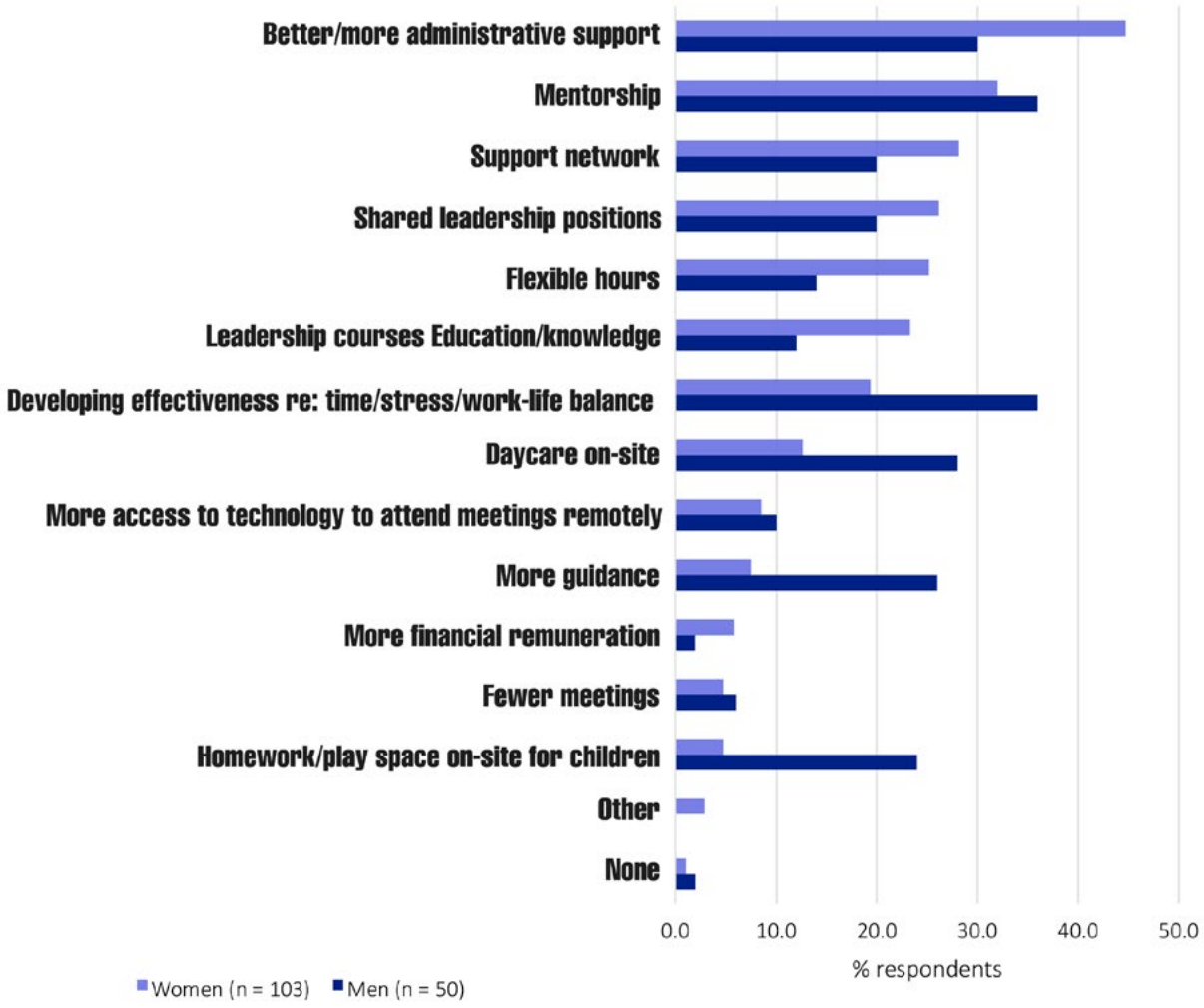
(Figure 1). Likewise, in terms of strategies to enable women to attain leadership, women emphasized improvements in the organization, whereas men chose strategies related to improvement of women's personal effectiveness (Figure 3).

We did not validate the truth of these perceptions, but focused on the perceptions themselves, knowing that they may drive actions and decisions and, thus, affect the problem of gender bias. These findings highlight the need to sensitize our current leaders (who are mostly men) about the existence of gender-discrepant perceptions of causes of and solutions to the gender gap in leadership. The results also underscore the need to shift the focus to organization-related changes to enable women, as well as some men who may also not be included in the current pool of leadership candidates, to apply for and assume leadership positions. This is aligned with findings by Carr et al.[30] that demonstrate that most institutions using strategies to support gender equity are focused on individual and interpersonal strategies, rather than organizational-level initiatives.

These results fit with research that examines gender inequality in terms of supply and demand.[35] The supply side of increasing the number of women in senior leadership roles focuses on how to change the women in the labour force (e.g., personal development). In contrast, the demand side focuses on structural accountability, such as changes to the jobs being offered and the processes through which leaders are selected. The supply side, emphasized by the men in our sample, has been more prominent in the past, but this approach has achieved limited results. The demand side, which the women in our sample favoured, is less common, but research suggests that this approach is more effective for increasing female representation in leadership today.[36]

Our study has some limitations. First, although our faculty response rate of 64.5% was in keeping with other published studies of similar scope,[12,37,38] we had a poor trainee response rate. This may be because the survey's focus was on faculty leadership as opposed to resident and fellow issues. Therefore, important insights related to barriers and strategies experienced before beginning as a faculty member may have been missed. Second, a survey-type study cannot tease out the nuances about why specific types of barriers and strategies were selected. Future research using semi-structured interviews could answer such questions. Third, our results are based on a relatively small sample (which limited some subanalyses) in a specific hospital and university context and, therefore, may not be generalizable. Although our data regarding the existence and causes of gender disparity are consistent with the literature, future research should validate our

Figure 3. Perceived strategies to enable women to take on leadership positions. Respondents were asked to choose the top three.



findings related to gender-based perceptions in other hospital and university settings.

Finally, the emphasis of our survey was on clinical and educational

leadership with fewer questions related to leadership in a research context. Future studies should aim to establish a definition of research leadership, which is not well delineated in the literature, and assess perceptions about challenges and strategies to women in research-related leadership.

In conclusion, we found that men and women differ in their

perceptions of the existence and causes of gender-related issues in leadership and the best approaches to improve gender diversity in these positions. This may be an important contributor to the persistence of gender disparity in medical leadership even in pediatrics departments, where most of the faculty are women. Future efforts to increase the number of women in medical leadership should include

enlightening departmental members, especially leaders, about deeply embedded implicit biases and gender-discrepant perceptions.

References

1.Horwitz IB, Sonilal M, Horwitz SK. Improving health care quality through culturally competent physicians:

leadership and organizational diversity training. *J Healthc Leadersh* 2011:3:29-40. doi.org/10.2147/JHL.S15620
2.Jung DI, Chow C, Wu A. The role of transformational leadership in enhancing organizational innovation: hypotheses and some preliminary findings. *Leadersh Q* 2003;14(4-5):525-44. doi.org/10.1016/S1048-9843(03)00050-X
3.Eagly AH, Johannesen-Schmidt MC, van Engen ML. Transformational, transactional, and laissez-faire leadership styles: a meta-analysis comparing women and men. *Psychol Bull* 2003;129(4):569-91.
4.Desvaux G, Devillard-Hoellinger S, Baumgarten P. Women matter: gender diversity, a corporate performance driver. New York: McKinsey & Co.; 2007. Available: **https://tinyurl.com/y9v4gecl**
5.Bismark M, Morris J, Thomas L, Loh E, Phelps G, Dickinson H. Reasons and remedies for under-representation of women in medical leadership roles: a qualitative study from Australia. *BMJ Open* 2015;5(11):e009384. doi.org/10.1136/bmjopen-2015-009384
6.Post C. When is female leadership an advantage? Coordination requirements, team cohesion, and team interaction norms. *J Organ Behav* 2015;36(8):1153-75. doi.org/10.1002/job.2031
7.Firth-Cozens J, Mowbray D. Leadership and the quality of care. *Qual Health Care* 2001;10(Suppl 2):ii3-7. doi: 10.1136/qhc.0100003
8.Reed DA, Enders F, Lindor R, McClees M, Lindor KD. Gender differences in academic productivity and leadership appointments of physicians throughout academic careers. *Acad Med* 2011;86(1):43-7. doi: 10.1097/ACM.0b013e3181ff9ff2
9.Abelson JS, Chartrand G, Moo TA, Moore M, Yeo H. 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* 2016;212(4):566-72 e1. doi: 10.1016/j.amjsurg.2016.06.012
10.Monroe AK, Levine RB, Clark JM, Bickel J, MacDonald SM, Resar LM. Through a gender lens: a view of gender and leadership positions in a department of medicine. *J Womens Health* (Larchmt) 2015;24(10):837-42. doi: 10.1089/jwh.2014.5054
11.Wise MR, Shapiro H, Bodley J, Pittini R, McKay D, Willan A, et al. Factors affecting academic promotion in obstetrics and gynaecology in Canada. *J Obstet Gynaecol Can* 2004;26(2):127-36.
12.Wright A, Schwindt L, Bassford T, Reyna V, Shisslak C, St. Germain P, et al. Gender difference in academic advancement: patterns, causes, and potential solutions in one US college of medicine. *Acad Med* 2003;78(5):500-8.
13.Kaplan S, Sullivan L, Dukes K, Phillips C, Kelch R, Schaller J. Sex differences in academic advancement: results of a national study of pediatricians. *N Engl J Med* 1996;335(17):1282-9. doi: 10.1056/NEJM199610243351706
14.Distribution of U.S. medical school faculty by sex, rank and department. Washington: Association of American Medical Colleges; 2017. Available: https://tinyurl.com/ybbpvc7a
15.Grimm LJ, Ngo J, Pisano ED, Yoon S. Men (and women) in academic radiology: how can we reduce the gender discrepancy? AJR Am J Roentgenol 2016;206(4):678-80.
16.Doyle M, Pederson A, Meltzer-Brody S. Demographic and personal characteristics of male and female chairs in academic psychiatry. Acad Psychiatry 2016;40(3):402-9. doi: 10.1007/s40596-015-0408-8
17.2014 Annual Women in Academic Medicine and Science Statistics and Benchmarking Survey: Table 9A. 2013 benchmarking – permanent division/section chiefs and department chairs. Washington: Association of American Medical Colleges; 2014. Available: **https://tinyurl.com/y8uppbdr**
18.Kvaerner KJ, Aasland OG, GS B. Female medical leadership: cross sectional study. *BMJ* 1999;318(7176):91-4. Available: **https://tinyurl.com/y8xhh67k**
19.Demographics of women physicians and pediatricians. Itasca, Ill.: American Academy of Pediatrics; 2013. Available: **https://tinyurl.com/y89mu42w**
20.Salsberg E, Rivers K. 2008 physician specialty data: Center for Workforce Studies. Washington: Association of American Medical Colleges; 2008. Available: **https://tinyurl.com/y9v9elg7**
21.Pediatrics profile. Ottawa: Canadian Medical Association; 2018. Available: **https://tinyurl.com/y76nte2q**
22.Stapleton FB, Jones D, Fiser DH. Leadership trends in academic pediatric departments. *Pediatrics* 2005;116(2):342-4. doi: 10.1542/peds.2004-2426
23.Rotbart HA, McMillen D, Taussig H, Daniels SR. Assessing gender equity in a large academic department of pediatrics. *Acad Med* 2012;87(1):98-104. doi: 10.1097/ACM.0b013e31823be028
24.Carr PL, Ash AS, Friedman RH, Szalacha L, Barnett RC, Palepu A, et al. Faculty perceptions of gender discrimination and sexual harassment in academic medicine. *Ann Intern Med* 2000;132(11):889-96.
25.Pololi LH, Civian JT, Brennan RT, Dottolo AL, Krupat E. Experiencing the culture of academic medicine: gender matters, a national study. *J Gen Intern Med* 2013;28(2):201-7. doi: 10.1007/s11606-012-2207-1
26.Cajigal S, Weiss G, Silva N. Women as physician leaders: challenges and opportunities. Medscape report. New York: WebMD; 2015. Available: **https://tinyurl.com/ychkj4bo**
27.Helitzer DL, Newbill SL, Cardinali G, Morahan PS, Chang S, Magrane D. Narratives of participants in national career development programs for women in academic medicine: identifying the opportunities for strategic investment. *J Womens Health (Larchmt)* 2016;25(4):360-70. doi: 10.1089/jwh.2015.5354
28.Morahan PS, Rosen SE, Richman RC, Gleason KA. The leadership continuum: a framework for organizational and individual assessment relative to the advancement of women phsyicians and scientists. *J Womens Health (Larchmt)* 2011;20(3):387-96. doi: 10.1089/jwh.2010.2055
29.Yedidia MJ, Bickel J. Why aren't there more women leaders in academic medicine? The views of clinical department chairs. *Acad Med* 2001;76(5):453-65.
30.Carr PL, Gunn C, Raj A, Kaplan S, Freund KM. Recruitment, promotion, and retention of women in academic medicine: how institutions are addressing gender disparities. *Womens Health Issues* 2017;27(3):374-81. doi: 10.1016/j.whi.2016.11.003
31.Carr PL, Gunn CM, Kaplan SA, Raj A, Freund KM. Inadequate progress for women in academic medicine: findings from the National Faculty Study. *J Womens Health (Larchmt)* 2015;24(3):190-9.

32.Buddeberg-Fischer B, Stamm M, Buddeberg C, Bauer G, Haemmig O, Knecht M, et al. The impact of gender and parenthood on physicians' careers – professional and personal situation seven years after graduation. *BMC Health Serv Res* 2010;10:1-10. doi: 10.1186/1472-6963-10-40
33.Carnes M, Morrissey C, Geller SE. Women's health and women's leadership in academic medicine: hitting the same glass ceiling? *J Womens Health (Larchmt)* 2008;17(9):1453-62. doi: 10.1089/jwh.2007.0688
34.Marchant A, Bhattacharya A, Carnes M. Can the language of tenure criteria influence women's academic advancement? *J Womens Health (Larchmt)* 2007;16(7):998-1003. doi:10.1089/jwh.2007.0348
35.Soja VE, Wood RE, Wood SA, Wheeler MA. Reporting requirements, targets, and quotas for women in leadership. *Leadersh Q* 2016;27:519-36. Available: **https://tinyurl.com/y8j3fvjc**
36.Arnold KA, Loughlin C. Continuing the conversation: questioning the who, what and when of 'leaning in.' *Acad Manage Perspect* 2018; in press. doi.org/10.5465/amp.2016.0153
37.Lucas R, Goldman EF, Scott AR, Dandar V. Leadership development programs at academic health centers: results of a national survey. *Acad Med* 2018;93(2):229-36.
38.Rimsza ME, Ruch-Ross H, Simon HK, Pendergass TW, Mulvey HJ. Factors influencing pediatrician retirement: a survey of American Academy of Pediatrics chapter members. *J Pediatr* 2017;188:275-9

Acknowledgements

The authors thank Michael Shevell, MDCM, Departments of Pediatrics and Neurology/Neurosurgery, McGill University and Montreal Children's Hospital for prioritizing and supporting this project within the department; Jean-Pierre Farmer, MDCM, neurosurgery, pediatric surgery, oncology and surgery, McGill University and Montreal Children's Hospital; Maria Psihogios, MD, PGY3, Department of Pediatrics, McGill University and Montreal Children's Hospital, and Christine Sabapathy MD, MSc, Division of Hematology-Oncology, Department of Pediatrics, McGill University and Montreal Children's Hospital for assistance with survey development; Jing Yang Xiao, Faculty of Medicine, McGill University, for survey data collection; Shauna O'Donnell, MSc, Research Institute, McGill University Health Centre (MUHC) and Nicholas Winters, MSc, Research Institute, MUHC for assistance with analyses. None of these people has any conflict of interest.

The Department of Pediatrics, McGill University funded the set-up, management, and data extraction for the online survey and data analysis and interpretation. The funding source was not involved in the study design; the collection, analysis, and interpretation of data; the writing of the report; or in the decision to submit the article for publication.

Author attestation

LHP conceptualized and designed the study, designed the data collection instrument design, coordinated and supervised data collection, acquired departmental funding, assisted with data analysis and interpretation, and drafted the initial and final manuscript; SZ conceptualized and designed the study, assisted with the creation of the data collection instrument and data interpretation, and reviewed and revised the manuscript; SL, JO, JP, AR assisted in the conceptualization and design of the study and creation of the data collection instrument and reviewed and revised the manuscript; IC carried out the initial and further analyses, assisted with data interpretation, and reviewed and revised the manuscript. All authors approved the final manuscript as submitted and agree to be accountable for all aspects of the work.

Financial disclosure: The authors have no financial relationships relevant to this article to disclose.

Conflict of interest: The authors have no potential conflicts of interest to disclose.

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This article has been peer reviewed.

INTERVIEW

Gillian Kernaghan: inspired by the past, but looking to the future

by Pat Rich

Most women physicians can reference female mentors or colleagues who have inspired them or provided them with guidance as they assumed leadership positions. But few reach back more than 300 years for such inspiration, as does Dr. Gillian Kernaghan, President and CEO of St. Joseph's Health Care in London, Ontario. As she wrote in Leading from the Front,[1] a book on physician leaders published by the Canadian Medical Association, in conjunction with the Canadian Society of Physician Leaders, in 2013:

> "It is humbling to realize that many leadership principles described today were articulated and lived in 1650 by rural French women who were the founders of the Sisters of St. Joseph. These courageous risk takers founded what is now St. Joseph's Health Care in 1869; I am honoured to continue that legacy of care into the future."

In an interview, Dr. Kernaghan said that, having served as the CEO for the faith-based institution since 2010, she continues to reflect on the attitude and work of the Sisters. "I found the principles they reflected are so very true. They were women who really went against the social norm, the religious establishment and the municipal establishment, to step out to do something different: very inspiring in lots of ways."

The Sisters of St. Joseph can be seen as an example of servant leadership, and Dr. Kernaghan says it is heartening to see such publications as the *Harvard Business Review*[2] take up this concept. As articulated by Robert F. Greenleaf and the Robert F. Greenleaf Center for Servant Leadership: "The servant-leader is servant first… It begins with the natural feeling that one wants to serve, to serve first. Servant leadership is a philosophy and set of practices that enriches the lives of individuals, builds better organizations and ultimately creates a more just and caring world."[3]

Dr. Kernaghan says this concept really resonated for her in reflecting what is important about leadership.

As a community family physician, Dr. Kernaghan's own journey in institutional leadership began in 1993 when she became VP Medical for Parkwood Hospital, a chronic care and rehabilitation establishment that is now part of St. Joseph's. At a time when few women were holding leadership positions in Canadian health care institutions, Dr. Kernaghan said she was fortunate to have sponsorship from the man who was CEO of the hospital at the time.

"I had never been in a formal leadership role before, and my first reaction was, 'I don't have the skills to do that'." However, she says, she was energized by her experiences as a volunteer board member at

the hospital and was also able to provide "the gift of time" to her family as the VP position meant she did not have to spend so many hours in clinical work.

At the time she accepted the VP position, Dr. Kernaghan says, there was still a sense that taking a full-time administrative role meant a physician had gone over to "the dark side." "To seek leadership as a career for a male or female physician was not seen as being of value."

Although this move from community medicine to administration was fairly smooth, Dr. Kernaghan says there was more risk involved when Parkwood merged with St. Joseph's and she was asked to take on the role of VP Medical for the amalgamated centre in 1997. With no women colleagues holding comparable positions to turn to for advice when she applied for this position, Dr. Kernaghan says she spoke to a male colleague who encouraged her to "be who you are and you'll earn the respect. This really encouraged me to be authentically who I am because I love being a woman and am very comfortable in who I am."

"For me that was a big leap," she says, noting that, at that time, no family doctor held a VP medical position in any Ontario hospital, no other women were in such a role, and she was 15 years younger than anyone else around the physician leadership table at the institution. As the result of a 360 external performance review held at about this time, Dr. Kernaghan says she realized she was beginning to drift into mimicking the leadership characteristics of a male career leader, and she said this made her "reset" her approach. "That caused me to really think hard about who I am as a leader and to try and be authentic as a leader."

Dr. Kernaghan describes her first year in the new role as being "very rough," as she experienced paternalism and lack of respect from some male colleagues. When she tackled one of her more outspoken critics about this attitude a couple of years later, she says, the person indicated that he had given her a hard time because he simply did not understand the process issues she was trying to raise.

Reflecting on her career in leadership, Dr. Kernaghan prefers not to judge whether any challenges to her leadership may be a result of bias against her simply because she is a woman. "I work hard not to go there. There are times when I have had challenges from people, but I have learned to be very reflective about that and assess how I might have contributed to the situation not going well." However, she says, during her medical school training she definitely experienced gender bias and "childish" behaviour from a few male teachers.

According to Dr. Kernaghan, there still seems to be a culture where the government tends to turn to senior male CEOs for guidance. "What are seen as traditionally more female attributes around leadership – relationship and trust-building, communication, and team work – have not, until fairly recently, been as valued in leadership circles."

Dr. Kernaghan references an international project looking at traditional male and female leadership attributes that found what people are looking for today – regardless of culture – tends to align more with what are traditionally thought of as female leadership attributes. And she says this skill set encompasses not only the "soft" skills, such as nurturing and team-building, but also a focus on being strategic and getting results. She describes this as a move away from the "heroic" leader toward the collaborative, servant leader.

"I do think the health care system is moving in that direction, as is business. This isn't just a social sector phenomenon." As a result of this trend, she says, more senior-level health care leadership positions will be held by people – male or female – who have these attributes.

To encourage more female physicians to take leadership positions, Dr. Kernaghan says she believes a change in culture is required – one that recognizes the leadership attributes of tomorrow rather than those that have brought us to today. This must be combined with a recognition that the skills of women physician leaders are valued.

Although women now make up 50% or more of practising physicians in Canada and the new generation of partners is more willing to share responsibilities, Dr. Kernaghan says it is unlikely

the health care sector will see a similar percentage of women holding leadership positions in the near future because there are too many other cultural pressures facing them. "The reality is that, as women, we are the ones who have kids. We're the ones who have to take a break in our careers in order to have a family." While some supports, such as maternity leave and parental leave, are now more prevalent that in the past, she says, more needs to be done in this area.

Barriers must also be removed that discourage female physicians from taking leadership positions at a younger age in a way that does not occur with their male counterparts, she says. "We need to encourage women based on their ability and not on their circumstances."

The challenge for current physician leaders, both male and female, she says, is to convey the satisfaction and "joy" that comes from working in leadership roles. Although leadership roles can involve long hours and financial sacrifices, Dr. Kernaghan says today's physician leaders must do a better job of expressing the satisfaction that can come from holding such roles.

Although she is not very active personally on social media, Dr. Kernaghan voices support for the value of social media networks in supporting women leaders and prospective leaders and giving them a voice and the power of the #MeTooMedicine movement. However, she says, she feels comments should focus on moving forward and building a positive environment for women rather than on negative events and attitudes from the past.

Asked what needs to be done to encourage the development of more female physician leaders, Dr. Kernaghan says that, in London, there has been a focus on a talent management model, where potential leaders are identified early and provided with mentoring and opportunities to develop leadership skills.

More thought about gender balance by physicians on selection committees for leadership positions is also required, she says, rather than just having this happen by chance. Selection committees must also decide ahead of time what attributes they are seeking for the position, so they can judge a person based on those rather than on other personal characteristics.

"We need to be more intentional about this," she says, not just from a gender but also a generational perspective, so that leaders are recruited who can lead in an intergenerational environment and nurture the new generation of female physician leaders.

Leadership is a privilege, and finding a leadership role that allows a person to develop based on their strengths will allow female physicians to excel. This, says Dr. Kernaghan, has been her experience and is a credit to many people on her leadership journey.

References

1.Kernaghan G. Redefining a health care brand. In Carruthers C, Lightfoot P (editors). *Leading from the front: experiences of Canadian physician leaders*. Ottawa: Canadian Medical Association and Canadian Society of Physician Leaders; 2013:36-42.
2.Cable D. How humble leadership really works. *Harv Bus Rev* 2018;23 April. Available: **https://tinyurl.com/yd46bepq**
3.Greenleaf RK. What is servant leadership. Atlanta, Ga.: Center for Servant Leadership; n.d. Available: **https://tinyurl.com/l6rxutn**

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Dr. Gillian Kernaghan is the 2018 recipient of the CSPL's award for Excellence in Physician Leadership. As one of her nominees wrote: "Gillian has demonstrated her absolute commitment to enhancing our leadership as physicians, has provided – regionally, provincially, and nationally – great leadership of our health care system and has helped create the CSPL's success as the national physician leader organization."

INTERVIEW

Kim Kelly: a strong and unwavering voice for women in leadership

by Pat Rich

"I appreciate the many opportunities of mentorship that I have received through my work with the AMA. Through AMA support, I have been able to develop my skills as a physician leader and positively affect the health of my community, city, and province." — Dr. Kimberley Kelly[1]

To this day, Dr. Kelly does not know who on the Alberta Medical Association (AMA) nominating committee put her name forward, in a closed session in 2015, to sit on the AMA Board of Directors. This was a turning point for her and gave her the opportunity, as an individual, to take a leadership position with the AMA.

"I've learned the term is 'sponsorship' for this type of endorsement by a leader. It's essential for our leaders to sponsor women and individuals from other underrepresented groups in order to address the inequity found in medical leadership. To have one person advocate for me behind closed doors and to have that action change the whole trajectory of my career is shocking," she said in a recent interview. "To me, this illustrates the power of sponsorship.

"You have to promote and support women all along the way," she says, and women need to learn not to be shy in promoting themselves or asking for leadership roles. "It's not a behaviour we have been taught.

"If you're not seeing leadership modeled, it's hard to imagine yourself in the role," she adds. "For example, the AMA has had only four female presidents since its creation in 1889. That's a key point. I feel men have a wide spectrum of leaders they can identify with and emulate. Women have far fewer leaders as role models.

"The AMA was the first health care organization to offer me a leadership position. This came almost 20 years after graduating from medical school. I was not mentored or supported prior to this. In fact, I sought out and created my own leadership opportunities in the education and non-profit sectors as I found few in the health care sector. I discovered that outside of health care, my leadership skills were validated and valued. I also received feedback, which allowed my skills to grow. Surprisingly to me, I have not yet received feedback on my leadership skills within the health care sector.

"I wonder how many talented women leaders we have lost because they grew tired of fighting against the system? Most women have not had mentors, have not been sought out for leadership, and have not received guidance in career development. I personally invested time and money in leadership training. I also spent a lot of time in search of opportunities. If our health care leaders are serious about addressing gender inequity and the lack of diversity and inclusion, resources need to be directed to mentoring, coaching, leadership training, and metrics.

"I think it's also important for health care leaders to know that, along the way, I was not encouraged but discouraged from entering leadership. Assumptions were made that I was too busy, that my kids were too little, and that my clinical practice wouldn't allow me the time for a leadership role. I wish I'd been asked these questions rather than assumptions made."

In addition to sitting on the AMA board, Dr. Kelly is a staff physician at the Alberta Health Services

Opioid Dependency Program in Edmonton. She is also an associate clinical professor in the Department of Family Medicine at the University of Alberta. The CBC recently described her as "among the foremost national leaders spearheading efforts to change the culture of medicine to be better for women."[2]

Earlier this summer, Dr. Kelly appeared on Dr. Brian Goldman's White Coat, Black Art radio program to describe how she was sexually harassed as a medical student. In an article published by CBC,[2] Dr. Kelly described her initial reluctance to appear on the show because she was worried that if she spoke out, she might lose her credibility to speak on other issues. She was quoted as saying: "I felt there was a big risk that my voice would be silenced.... But it also made me realize, how difficult it is for someone who hasn't reached the level I'm at to speak up."

Dr. Kelly has applied to be part of a working group in Alberta to discuss diversity and inclusion across the health care system and to address sexual harassment. With seven other collaborators, she has applied to the Canadian Medical Association for a Community of Interest grant to establish a national virtual network of medical leaders to raise awareness and discuss topics related to gender equity, such as the strengths women physicians bring to the medical community, the advantages of diversity in leadership, the relation between gender discrimination and physician health, and #MeTooMedicine. She is hopeful the community will identify some solutions.

#MeTooMedicine is a hashtag used on Twitter by women physicians to share experiences about sexual harassment and abuse. "I think the #MeTooMedicine movement has been extremely important" she says. With women making up more than half of medical school classes for 20 years now, there should be more women leaders than there are," Dr. Kelly says, indicating that factors other than numbers have been impeding women from taking leadership positions. "I think #MeTooMedicine has allowed women to have a stronger voice and to be heard."

On social media – especially Twitter – Dr. Kelly is a strong and unwavering voice in support of the #MeTooMedicine movements and the need for more women physicians to hold leadership positions. In a way she is the personification of a recent *New England Journal of Medicine* article[3] that discusses the growing presence of women physicians on social media and the potential for such platforms to support women physicians and help them overcome traditional barriers to professional development.

Dr. Kelly says Canadian women physicians are using social media to voice decades of frustration. Although some may see their comments as reflecting anger or unhappiness, she says, "I see it as empowerment. It's sharing stories. It's positive. It's a place you can go to receive support and advice."

"I know the excitement and energy behind the comments," Dr. Kelly says. Because there are so few women in leadership positions, social media was the first place she discovered aligned opinions expressed and broader perspectives discussed.

"I have learned a lot from other women leaders on social media and from the research on gender inequity in medicine that gets posted. I was recently unsuccessful in a leadership position that I applied for. A year ago, I would have thought I was an inferior candidate. With my new

knowledge and support, I now believe I am an excellent candidate but am aware that I also face biases and other barriers that slow my progression. It's frustrating, but knowing the bigger picture and root causes has actually been empowering. I now feel that by discussing my experiences of inequity I can help advocate for improvements in our system."

Having evidence to back up charges of systemic gender inequities has been an important factor driving change. "It's so much easier to go to a meeting and not just voice my experience and my female colleagues' experiences but to show that the data that indicate this is significant." The next step, she believes, is for organizations to determine their own metrics. "You can't change what you can't measure."

When it comes to women seeking leadership positions in medicine, Dr. Kelly says the glass ceiling is still a very real factor. "I've experienced the glass ceiling myself and I've witnessed it happening to other women who should have progressed to the top but didn't. That was a wake-up call for me. I realized that my own unconscious biases played a role. It is crucial for me to be aware of my biases, assumptions, and stereotypes when I sit on selection committees."

But, Dr. Kelly also feels things are changing for the better. "I am excited to see many women entering leadership in medical school and residency." She sees a gap for women physicians in mid-career. "I feel many women already have the skills and are ready to lead. They just need to be given the opportunity."

Addressing the current leadership void with women physicians means first raising awareness of the issue and providing the evidence to document it. "I still don't think the majority of physicians know or accept there is a problem." Medical organizations must acknowledge the problem and this will take both individual and organizational courage, Dr. Kelly says.

"Processes then need to be established to make improvements. It will take time but positive change is upon us."

Reference

1.Kelly K. Dr. Kimberley P. Kelly. Edmonton: Alberta Medical Association; 2016. Available: **https://tinyurl.com/ydhtmd3a**
2."What happened was wrong": why this doctor spoke up about her #MeToo experience. Toronto: White Coat, Black Art; 2018. Available: **https://tinyurl.com/y94mcn32**
3.Shillcutt SK, Silver JK. Social media and advancement of women physicians. *N Engl J Med* 2018;378:2342-5.

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STORIES FROM OUR CCPES

Leadership: the evolving journey

by Margaret Steele, MD

Editor's note: We asked CSPL members who have qualified as Canadian Certified Physician Leaders to tell us something about their "path" to leadership: what inspired them, how they succeeded, what they've learned. We hope their thoughts help you in your similar journey.

Reflecting on my leadership journey, I realize that, like so many others, I did not set out to be a leader, let alone the dean of a Canadian medical school. How did I evolve into a leader? Mentorship and sponsorship have been instrumental to my career.

As a medical student, I was a bit intimidated by being in a class full of intelligent people, many of whom had parents who were physicians, whereas I came from a hard-working, middle-class family. Along with one of my classmates, I became co-chair of the mentorship program, as I recognized that I needed to understand the world of medicine and how I was going to become

a professional. This was my first leadership role in medicine. Unfortunately two of my mentors had their own challenges, one ended up taking their life and the other had to change their scope of practice.

After these experiences where I was matched to a mentor, I decided to seek out a mentor on my own. I met Dr. Sandra Fisman, a child and adolescent psychiatrist, who became not only the chair/chief of child and adolescent psychiatry but also the chair/chief of the Department of Psychiatry at the Schulich School of Medicine & Dentistry at Western University. Little did I know that Dr. Fisman would play an instrumental role, not only in my career choice, but also as a leader.

Dr. Fisman nominated me to sit on the Board of the Canadian Academy of Child and Adolescent Psychiatry (CACAP). This expanded my network as well as providing me with an opportunity to learn about leadership in a professional organization. I was also nominated to sit on the Council of the Ontario Psychiatric Association (OPA) and the Section of Psychiatry in the Ontario Medical Association. I slowly progressed to become president of the OPA and then of the CACAP. I learned a tremendous amount by being involved in professional organizations. I participated actively, reading minutes, asking questions, advocating for child and adolescent psychiatry, leading initiatives. Through these experiences, I gained the respect of my peers, community stakeholders, and other health professionals.

My message to my students and colleagues has been: engage in things you are passionate about, have some fun, and, ultimately, make a difference for people.

The second significant mentor in my leadership career was Dr. Carol Herbert, who was dean of the Schulich School of Medicine & Dentistry. Dr. Fisman let Dr. Herbert know that I had some leadership skills, and Dr. Herbert invited me to participate in some school-wide programs, such as a Harvard Macy Medical Education Leadership program.

Dr. Herbert then nominated me for the Executive Leadership Program for Women in Academic Medicine at Drexel University in Philadelphia. Through this program, I had monthly mentorship meetings with Dr. Herbert, and she introduced me to other leaders in the faculty of medicine, the greater university, and hospitals. She encouraged me to "think big," so I set my goal to be dean of a Canadian medical school. Eight years later I realized this goal, becoming the first female dean of the faculty of medicine at Memorial University.

Often, women leaders have not had female mentors. I have been incredibly fortunate to have two key women mentors in addition to several male mentors. They have all encouraged me, provided guidance on leadership questions, and opened doors for me. I hope that I will carry on their legacy of mentorship. I have tried to mentor students, faculty members, and other professionals so that they can achieve things that they never thought they could.

Having strong women leaders in academic medicine, hospitals, professional organizations, and other aspects of health care is important, so that they can contribute to the evolution and transformation of health care. With women making up more than 50% of medical school graduates, but fewer than 20% of senior administrators in academic medicine or health care, it is essential that we senior leaders provide mentorship and opportunities for our young women aspiring leaders. Women leaders can raise the profile for research into gender differences in diseases and health care services. It is important for women leaders to be role models for medical students and physicians to look at a variety of health care leadership roles.

As the dean of the faculty of medicine at Memorial University, I have continued my interest in mentorship. I have struck a mentorship working group led by the vice dean, Dr. Cathy Vardy, to develop the culture of mentorship in our faculty.

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BOOK REVIEW

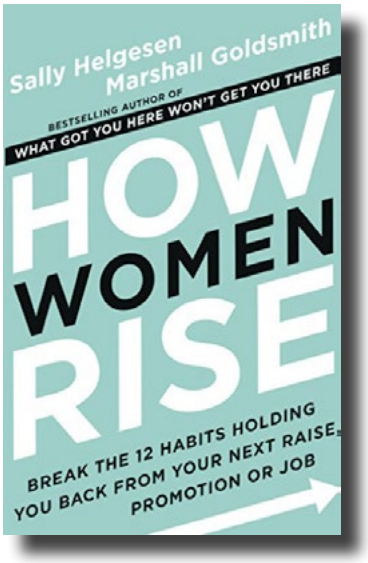
How Women Rise: Break the 12 Habits Holding You Back from Your Next Raise, Promotion, or Job

Sally Helgesen and Marshall Goldsmith
Hachette Books, 2018

Reviewed by Shayne P. Taback, MD

Sally Helgesen, a writer, speaker, and executive coach, has been a prominent expert on women's leadership since her 1990 publication of *The Female Advantage: Women's Ways of Leadership*.[1] Her seventh book, *How Women Rise*, results from a collaboration with famed executive coach Marshall Goldsmith, the creator of stakeholder-centred coaching.

In 2007, Goldsmith published *What Got You Here Won't Get You There: How Successful People Become Even More Successful*,[2] describing his methods to help (mostly male) business leaders reach the pinnacle of their corporations by eliminating toxic, derailing behaviours. Much of the advice in that book will not resonate with women leaders; the men in Goldsmith's book suffer from rampant overconfidence. They are optimistic and resilient risk-takers and wired for success of a sort. However, their need to always win leads to toxic behaviour: they never listen, brag about accomplishments, take undeserved credit for what goes well, pass the buck when things don't go well, never apologize, never thank, and vehemently resist change until they are on the verge of professional and sometimes personal disaster.



Women need a different book. Helgesen and Goldsmith follow a philosophy similar to that of Sheryl Sandberg in *Lean In*[3]: acknowledge the systemic gender harassment and the resulting no-win situations that women encounter in the workplace, but focus on changing the individual behaviours and underlying mental models that can hold women back.

A key focus is on replacing unhelpful mental models that create unnecessary internal conflicts as a result of "either-or" thinking. Success, ambition, power, and career self-interest *need not conflict* with strong core values such as putting other people's needs first and not disappointing others. Key words are reframed: "ambition" as the desire to maximize your talents in the service of work you find worthwhile and rewarding, and "healthy career self-interest" as creating the conditions for building a career that gives full scope to your talents while providing you with the means to build a life that feels satisfying and worthwhile. Power is reframed as the potential to influence people but positional power is not neglected. The authors quote Peter Drucker, who said the decision is always made by the person with the power to make the decision.[4]

The focus of the book then shifts to 12 behavioural habits based on the unhelpful mental models that hold women back. This section is approached carefully to avoid being overly critical. Helgesen's female clients are generally too hard on themselves despite being more open to change than Goldsmith's male clients. The 12 habits include: reluctance to claim achievements, expecting others to spontaneously notice and award contributions, overvaluing expertise, not leveraging relationships, not enlisting allies from day one, the perfection trap, the disease to please (you know who you are), putting job before career, self-minimization, too much information, being distracted by sensitivity to others, and ruminating.

It is difficult to choose examples of these habits to discuss; each section contains considerable insight. For example, women are excellent relationship-builders and leverage relationships very well in aid of good works, but many hold back from leveraging in aid of their own work success. Failing to enlist allies gets at the

importance of weak ties: mentors are good, sponsors are better, neither is magic, many allies are essential. Ruminating is not reflective, preventive, educational, restorative, productive, or self-compassionate.

The book closes with a discussion of techniques to support behavioural change. Often just tweaking one of the 12 behaviours can make a significant difference in terms of leadership development. All in all, readers may find this book to be of greater practical use than *Lean In*.[3]

Finally, this book resonates with women – but not only women! A healthy minority of men share the same mental models, attitudes, and behaviours discussed in *How Women Rise* and will also benefit from reading this book. Leaders who mentor these men should also keep this resource in mind.

References

1.Helgesen S. *The female advantage: women's ways of leadership*. New York: Doubleday, 1995.
2.Goldsmith M. *What got you here won't get you there: how successful people become even more successful*. New York: Hyperion, 2007.
3.Sandberg S. *Lean in: women, work, and the will to lead*. Toronto: Random House, 2013.
4.Goldsmith M. What I learned about influence from Peter Drucker. The Blog, Huff Post 2014;11 Apr. Available: https://tinyurl.com/y75fksjd

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VOLUNTEER WANTED

Looking for a volunteer editor-in-chief

Do you love networking? Are you passionate about health care and health systems? Would you like to stay informed about what is happening in physician leadership across Canada and internationally? Are you interested in reading, analyzing evidence, writing and reviewing papers or books?

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- good verbal, electronic, and written communication skills
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- knowledge of the national, provincial, and, to some extent, international past and present issues as they relate to health systems and system transformation, as well as the factors influencing health systems and health
- understanding and knowledge of the theoretical and practical aspects of leadership

The editor-in-chief must be able to attend and network at our annual Canadian Conference on Physician Leadership and communicate with the CJPL editorial board and with the CSPL board. The successful candidate will be supported by an outstanding copy editor, the designer of the journal and website, a managing editor and a 20-member editorial board that assists with reviews.

If you are interested in pursuing this opportunity, which may be for a defined period, or if you would like further information, please contact the CSPL executive director by email at carol@physicianleaders.ca

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