ADDRESSING GENDER EQUITY AND DIVERSITY IN CANADA'S MEDICAL PROFESSION: A REVIEW

ASSOCIATION MÉDICALE CANADIENNE
CANADIAN MEDICAL ASSOCIATION

Federation of Medical Women of Canada
Fédération des femmes médecins du Canada

ABSTRACT

IMPORTANCE:
Gender inequity in the medical profession is a pressing issue, given that women continue to face substantial differences in treatment, discrimination and harassment even as they are projected to represent half of the physician pool in the coming decades. Diversity in medicine is an associated and confounding issue that has received little attention to date.

OBSERVATIONS:
Research evidence regarding gender equity in the medical profession is limited in the Canadian context, and a further dearth of data affects the understanding of diversity in medicine. Drawing from the available literature, themes were identified describing cultural bias, discrimination, sexual harassment, leadership inequity, pay inequity, impacts from relationships and family, impacts on physician health, intersecting marginalization of other inequity groups, and positive impacts of women's participation in the medical profession. Taken together, there are many layers of inequity causing the continued marginalization of women in medicine.

CONCLUSIONS AND RELEVANCE:
The causes and consequences of the marginalization and disrespect of women within medicine originate both individually and collectively, and confronting these drivers of inequity is, therefore, a shared responsibility. In addition to efforts addressing the general lack of data on gender and diversity inequity, there is also a need for conceptualization at the individual and systemic levels to define and elevate the discussion for all concerned parties and stakeholders to better promote a vibrant and engaged profession.

INTRODUCTION

The issues of equity and diversity in medicine have attracted significant interest in recent years, particularly as they relate the role of women in medicine. Currently, 54% of physicians in Canada under age 40 are women,[1] and it is projected that the physician pool will be evenly split among women and men by 2030.[2] While the representation of women, and other marginalized groups, within the medical profession is improving, discrimination and bias at the individual and systemic levels continue to create barriers to their advancement, health and livelihood.

Evidence suggests that women physicians continue to face significant challenges such as pay inequity, sexual assault and harassment, opposition to career advancement, and unconscious bias in the workplace.[3] Leading international organizations and institutions are confronting these challenges by creating guidelines, instituting policies and implementing programming around gender equity and diversity.[4-7] In Canada, however, there are limited data and few guidelines that address the challenges women physicians and learners face, and there is a further dearth of data on diversity in medicine.[8]

CULTURAL BIAS AND DISCRIMINATION

Gendered stereotypes and role expectations[i] continue to have an impact in the field of medicine, where women face an implicit bias that can negatively affect their hiring, promotion, career development and well-being[9,10] as well as their career choices and trajectories.[11,12]

For example, across specialties, medical learners have been shown to perceive women physician instructors to be less able as educators than male instructors.[13] More broadly, physicians working in areas with strong gender expectations face implicit bias that increases their likelihood of experiencing negative evaluations from, or interactions with, patients, learners, colleagues and senior physicians.[13,14]

It is common for women to face discrimination, harassment and disrespect, often by their peers and senior physicians[15,16], in the current medical culture, where they are frequently still just tolerated in training or practice.[17,18] This reality probably also creates a significant barrier to achieving greater diversity in medicine (e.g., physicians with disabilities, racialized physicians). Experiences of discrimination in the workplace are not uncommon for physicians; in one study, 51% of women and 31% of men reported experiencing workplace discrimination. The same study found that women physicians were five times more likely than their male colleagues to experience opposition to career advancement and three times more likely to experience actions they perceived to be disrespectful or punitive within the workplace.[19] In a recent study investigating a subtler form of bias implicit in speaker introductions during grand rounds, 69% of women were introduced by their formal title compared with 79% of men; this disparity was exaggerated (23% difference) when men made the introductions.[20]

Even more alarming is that sexual harassment, assault and sexism have been found to be shared experiences across generations of women physicians.[21] Researchers have found that 30% of women physicians and learners have experienced sexual harassment in their workplace or learning environment: 40% of these women indicated that the harassment was severe, and 47% reported that these incidents negatively affected their career advancement.[22] Women medical students have poignantly described these experiences as a "crummy rite of passage."[23]

[i] Gender roles and expectations are a way of thinking and acting, usually according to what are expected or agreed-upon societal norms, and shape individuals' identity and relation to themselves and others.

LEADERSHIP INEQUITY

The impact of gender bias is also evidenced by the lack of women in leadership roles; women are disproportionately underrepresented in the upper echelons of academic medicine and medical practice.

For example, of 17 Canadian medical schools, only two presently have women deans and only three other schools have had women deans in the past, for a total of only five women deans (13% of turnover since 1999; data not shown). Although Canadian data are scarce, anecdotal evidence suggests that Canadian women, like their American counterparts, are also underrepresented as senior authors, editors, full professors and department chairs in academic medicine and are less likely to be CEOs or board members of major medical corporations.[3,24-26] Many other factors contribute to the scarcity of women in medical leadership positions, including a lack of senior women mentors,[27,28] low rates of sponsorship of women physicians to take on leadership roles,[13,29] and self-doubt despite proven success (termed the imposter syndrome).[30] The influence of culturally embedded bias and overt instances of harassment should not be underestimated in assessing the lack of inclusion of women in these influential roles.

PAY INEQUITY

An important systemic driver that may perpetuate the inequity experienced by women physicians is the current physician remuneration system, which rewards procedural tasks over cognitive and caring tasks.[31]

Notably, highly procedural and well-remunerated medical specialties tend to be male dominated and associated with a culture promoting competitive social behaviours.[24] Furthermore, women physicians' tendency to spend more time with patients, focussing on psychosocial health, counselling, and including patients in decision-making,[32,33] is not financially rewarded under the current schedule of benefits, penalizing physicians who practise this way despite the downstream benefits of this style of care for patients and the cost of health care. This situation contributes to the pay inequity experienced by women physicians, who, on average, earn less annually in primary care (16% gap) and specialties (37% gap) than their male colleagues.[34,35]

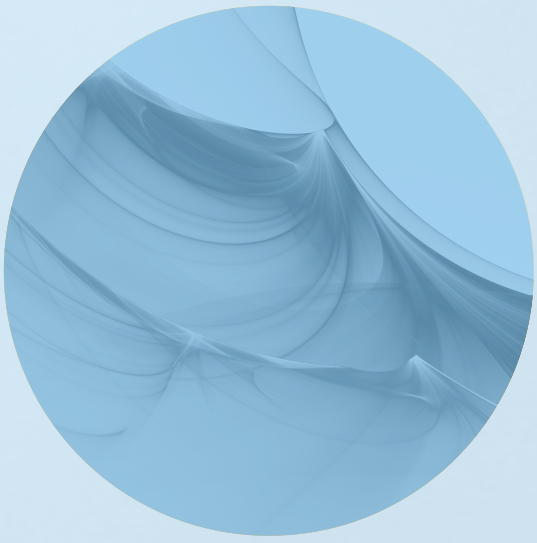
Critics of gender pay inequity cite additional factors contributing to this pay gap, such as specialty choice, hours worked and choices made to better integrate work and personal lives.[36] However, multiple studies have found that remuneration disparities remain even after controlling for factors such as region, years of practice, participation in clinical trials, number of publications, specialty, age, hours worked and practice characteristics.[37-39]

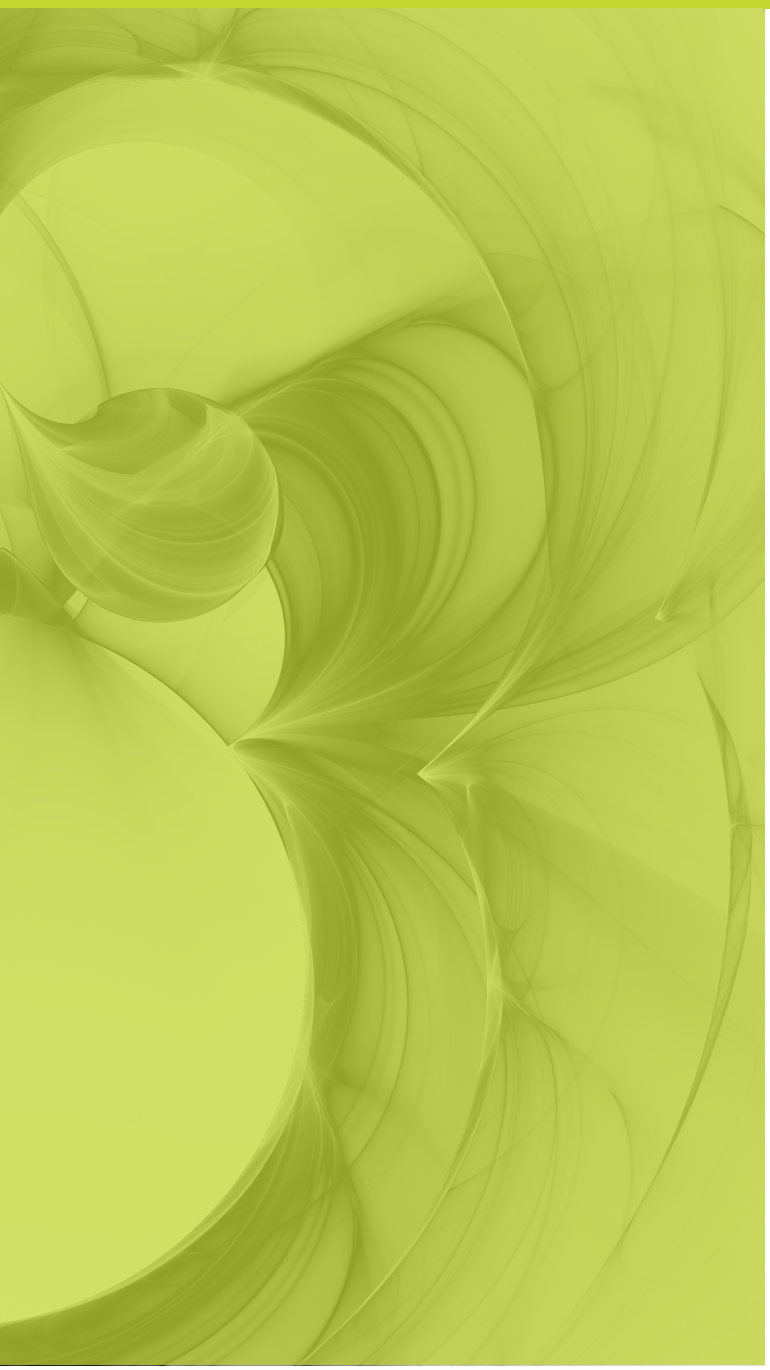
FAMILY AND RELATIONSHIPS

Women continue to play a primary role in family and domestic responsibilities[35,40] and are likely to spend significantly more time than their male peers on child care and domestic tasks.[41,42]

This disparity is highlighted in dual-physician households with young children, wherein women work 11 fewer hours per week, on average, to accommodate household responsibilities while men's work hours do not significantly differ.[43] The challenges associated with balancing work and family obligations have been shown to contribute to compromised health and wellness in women physicians.[44] Further, physician-mothers may be particularly vulnerable to experiencing discrimination such as disrespectful treatment, exclusion from administrative decision-making, and disparate pay and benefits (termed the *maternal wall*).[45]

Women are also often encouraged by mentors to choose specialties that are perceived to allow for the greatest work–life integration, as highlighted by a medical student: "I can't even tell you the number of times I've heard the phrase 'It's a good career choice for women.'"12 Indeed, while the number of women physicians is increasing, the number of women choosing a surgical specialty is not keeping pace.[46] Similarly, career choice influences women physicians' decision when, and if, to have children. Women surgeons are significantly more likely to postpone parenthood until after training,[33] at least in part because surgical training is seen as incompatible with pregnancy and child rearing.[47] Notably, those in administrative leadership roles sometimes perceive parenthood as negatively affecting the well-being of women students.[47]





IMPACT ON HEALTH AND WELLNESS

While gender bias, and its consequences observed in the medical profession, may often be unintentionally perpetrated, the impact of such bias is not benign[13] and has been linked in the literature most notably to poor physician health.[10]

This was reinforced by the results of the 2017 CMA National Physician Health Survey, which revealed that women reported significantly higher rates of depression, lifetime suicidal ideation and burnout than men (Table 1). Those reporting binge drinking,[ii] presenteeism,[iii] a low level of collegiality[iv] or being dissatisfied with the efficiency and resources at their workplace were significantly more likely to experience burnout. Importantly, dissatisfaction with work–life integration predicted a three times greater likelihood of burnout while those who reported being dissatisfied with their career in medicine were over nine times more likely to experience burnout (Table 1).

Putting these data into context, poor work–life integration may be linked to the increased demands on women at home, as they continue to take on most of the family responsibilities.[41] Moreover, harassment and disrespect from peers contribute to negative perceptions of collegiality in the workplace. Finally, factors such as lack of growth in one's career as well as pay inequity influence career dissatisfaction,[48] the strongest predictor of burnout. These findings suggest that if the issues identified persist, women physicians will continue to be at high risk of burnout, which can lead to severe consequences if they do not receive adequate support.[49]

[ii] Binge drinking: consuming more than five drinks on one occasion.
[iii] Presenteeism: going to work five or more times when physically ill or distressed.
[iv] Collegiality was calculated using a composite score of four items, assessing colleague (a) support, (b) respect, (c) teamwork and (d) conflict resolution.

INTERSECTING MARGINALIZATION: RACE, SEXUALITY, GENDER IDENTITY AND DISABILITY

While medical education has begun to include training in social and cultural competency, the limited available data suggest that the Canadian medical workforce does not reflect the diversity of the patients it serves.[2,3] It has been argued that true social and cultural competency will be best developed through increased diversity of the physician workforce itself.[3,50]

Challenges are amplified for women in medicine who also identify with one or more other determinants of inequity (e.g., racial minority, low socioeconomic status, religious views, LGBTQ2+, disability).[51,52] Limited evidence illuminates these struggles in the Canadian context,[53-56] and the sensitive nature of performing studies in these areas, especially in demographic groups with smaller numbers, makes the exploration of this topic difficult. Ensuring that voices emerging from diverse backgrounds are heard is therefore important in designing programs and policies across the health care system to better represent the changing fabric of society.

THE POSITIVE IMPACTS OF THE INCREASING ROLE OF WOMEN IN MEDICINE

The increase in the number of women physicians has had marked effects on medical practice and culture, quality of care and the organization of the health care system,[57] resulting in benefits for patients, learners and the system.[58]

For example, women physicians spend about 10% longer with patients, resulting in 6% fewer visits per patient.57 They also focus on preventive medicine more often than their male colleagues, allowing for earlier detection of and intervention for conditions.[59,60] Women also have the potential to be disruptors within the medical profession, as evidenced by the women-led push for greater work–life integration and the implementation of reforms that enhance the integration of care through multidisciplinary teams.[3,61]

The communication style and empathy that women physicians tend to exhibit[62] help to establish trusting relationships with patients, resulting in greater patient satisfaction and greater adherence to preventive and curative interventions.[57,63] This tendency, and indeed expectation, of women to be empathetic, caring and nurturing[64] may also explain many patients' preference to discuss sensitive topics such as mental and sexual health with a woman physician.[65] Perhaps these behaviours also contribute to the small but growing body of literature indicating that patients treated by women physicians have lower hospital readmission and mortality rates following surgery and hospital stays.[66,67]

MOMENTUM IN ATTAINING EQUITY AND DIVERSITY

Despite the many ongoing issues surrounding equity and diversity in the medical profession, there are a growing number of guidelines, policies and programs addressing some of the disparities.

In addition to national organizations and federations specifically dedicated to providing support and a voice for inequity groups, there appears to be a growing movement to establish equity, diversity and inclusivity within the organization of medical education and professionalism training.7 These initiatives and changes to policy, organizational structure and curriculum provide a strong platform for supporting and effecting change. Larger efforts, however, will probably be required to accelerate the changes required to attain a comprehensive level of equity and inclusivity.[6,68]

For gender equity in particular, there are a growing number of initiatives, leadership courses and outreach opportunities. These efforts are often aimed at creating discourse and support, though some are attempting to address specific ongoing disparities such as those found in funding or representation within academic leadership.[4,5] It should be noted that assessing the impact of programs in this field is difficult because of the complex and multifaceted nature of gender equity within the culture of medicine; as such, it is important to acknowledge calls to adopt an integrated perspective on these many facets and to act on multiple system levels in a concerted fashion68 to transform momentum into tangible results.

CONCLUSIONS AND FUTURE DIRECTIONS

Women are a growing cohort of the medical workforce but have yet to achieve equity in many areas of their personal and professional lives.[3,32] The challenges facing women in medicine are broad and systemic and transcend geography, specialty and age.[21] These challenges are often compounded for women physicians who identify with a second characteristic of marginalization.

The causes and consequences of the marginalization and disrespect that women face within medicine originate, and are felt acutely, both individually and collectively. Thus, confronting these drivers of inequity is a shared responsibility. Systematic action should be taken at both the individual and system levels to better promote a vibrant and engaged profession.[69] Poor physician health affects the individual physician and also has negative consequences for patient care and the health system at large,[70-72] which further emphasizes the need to support physicians, including women and other marginalized groups.

To address gender equity and diversity issues in Canadian medicine, the lack of data for these issues requires attention and a concerted effort across organizations and institutions. Beyond data, there is also a need for conceptualization at the individual and systemic levels to define and elevate the discussion for all concerned parties and stakeholders. Acknowledgement of the need for equity, diversity and inclusion requires action in regard to the development and implementation of programs and resources.

Table 1.

Binomial logistic regression analyses testing for predictors of burnout in female physicians and residents, using data from the 2017 CMA National Physician Health Survey.

Behavioural and occupational predictors	95% CI for odds ratio				
	Odds ratio	Lower	Upper	B	SE
Physical activity	0.85	0.57	1.27	-0.16	0.20
Healthy eating	1.28	0.81	2.03	0.25	0.23
Personal doc	1.33	0.79	2.26	0.29	0.27
Alcohol binge*	1.85	1.04	3.29	0.61	0.30
Substance use	1.23	0.55	2.77	0.21	0.41
Sleep hours	0.83	0.67	1.04	-0.18	0.11
Presenteeism **	2.09	1.15	3.79	0.74	0.30
Collegiality*	2.10	1.17	3.77	0.74	0.30
Work–life integration satisfaction*	3.11	2.01	4.81	1.13	0.22
Career satisfaction***	9.18	4.71	17.89	2.22	0.34
Efficiency/resources satisfaction**	2.10	1.36	3.23	0.74	0.22
Work hours	2.10	1.17	3.77	0.74	0.30

* $p < .05$; ** $p < .01$; *** $p < .001$

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