



Original Article

Sex, Gender, and Equity in Cardiovascular Medicine, Surgery, and Science in Canada: Challenges, Successes, and Opportunities for Change

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ABSTRACT

Background: A previous review of sex, gender, and equity within cardiovascular (CV) medicine, surgery, and science in Canada has revealed parity during medical and graduate school training. The purpose of this study was to explore sex and gendered experiences within the Canadian CV landscape, and their impact on career training and progression.

Methods: An environmental scan was conducted of the Canadian CV landscape, which included an equity survey using Qualtrics software.

Results: The environmental scan revealed that women remain underrepresented within CV training programs as trainees (12%–30%), program directors (33%), in leadership roles at the divisional level (21%), and in other professional or career-related activities (< 30%). Our analysis also showed improvements of career engagement at

RÉSUMÉ

Contexte : Une étude antérieure portant sur le sexe, le genre et l'équité en médecine, chirurgie et sciences cardiovasculaires (CV) au Canada a révélé une parité au cours de la formation médicale et des études supérieures. L'objectif de cette étude était d'évaluer les expériences liées au sexe et au genre dans le paysage canadien du domaine CV, et leur impact sur la formation et la progression de carrière.

Méthodes : Une analyse de l'environnement du paysage canadien dans le domaine CV a été réalisée, incluant une étude sur l'équité en utilisant le logiciel Qualtrics.

Résultats : L'analyse de l'environnement a révélé que les femmes restent sous-représentées dans les programmes de formation du domaine CV que ce soit en tant que stagiaires (12 à 30 %), directrices de

There has been increasing awareness of sex, gender, and equity issues within medicine, surgery, and science.^{1–5} A successful career within the cardiovascular (CV) forum can be

challenging, particularly for women, in part due to barriers related to balancing career and family responsibilities.^{6,7} A comparative survey of female and male medical students in the United States (US) found that, along with difficulties finding mentorship, 83% of women felt family planning would make it harder to pursue a cardiothoracic surgery career.⁸ Another US survey of female and male internal medicine trainees cited the lack of work–life balance and the lack of diversity among barriers to pursuing a cardiology-based career. Sixty-five percent of female American College of Cardiology members have indicated that their careers impacted family planning decisions,⁷ and fewer female vs male cardiothoracic surgeons were married (26% vs 62%, $P < 0.001$) and had children

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these levels of women at over time. The thematic analysis of the equity survey responses (n = 71 respondents; 83% female; 9.7% response rate among female Canadian Cardiovascular Society members) identified the following themes reported within the socio-ecological framework: desire to report inequities vs staying the course (individual level); desire for social support and mentorship and challenges of dual responsibilities (interpersonal level); concerns over exclusionary cliques and desire for respect and opportunity (organizational level); and increasing awareness and actions to overcome institutional barriers and accountability (societal level).

Conclusions: Although women face challenges and remain under-represented in CV medicine, surgery, and science, this study highlights potential opportunities for improving access of female medical, surgical, and research trainees and professionals to specialized cardiovascular training, career advancement, leadership, and research.

(19% vs 49%, $P < 0.001$).⁸ In 512 US-based CV programs, fewer women were division chiefs (5% vs 95%) and program directors (14% vs 86%) relative to male academic cardiologists.⁹ In the fourth annual Go Red for Women issue, Khan et al.¹⁰ described fewer women among the 2017–2018 trainees in US adult cardiology programs overall (21.4% [710 of 3316], slightly up from 15.9% a decade earlier), with even fewer represented in the invasive subspecialties (10% in interventional cardiology; 12% in electrophysiology), in contrast to 31% in advanced heart failure and transplant, and 47% in adult congenital heart disease. In general, the invasive specialties had fewer women than men, with a slight rise from a decade ago in the proportion of women enrolled.¹⁰ Balasubramanian et al.¹¹ reported 0 and 1 women serving as editor-in-chief for US and European general cardiology journals, respectively, from 1998 to 2018. There were more female deputy/associate editors (21% vs 9%, $P = 0.02$), but a similar low percentage of female editorial board members (13% vs 12%, $P = 0.60$) of the US and European general cardiology journals, respectively. A similar trend was seen among US and European subspecialty cardiology journals.¹¹ Female cardiothoracic surgeons were less likely to perform research in their academic careers (65% vs 88%, $P = 0.04$) despite having similar research experience as men in their profession.¹² Furthermore, the proportion of female subjects participating in 740 CV trials registered on [ClinicalTrials.gov](https://www.clinicaltrials.gov) from 2010 to 2017 was 38% overall.¹³

We previously reported the historical context and current state of affairs relevant to sex, gender, and equity within CV medicine, surgery, and science during medical and graduate school training in Canada.¹⁴ However, knowledge gaps still exist pertaining to career choice, acceptance rates, training, career advancement, leadership, research, and patient engagement within the CV domains in Canada that can be impacted by sex and/or gender identity. Thus, our primary aim was to gain a clearer understanding of the experiences of women vs men in these career-related domains within the Canadian CV landscape.

programme (33 %), dans les rôles de direction au niveau divisionnaire (21 %) et dans d'autres activités professionnelles ou associées à la carrière (< 30 %). Notre analyse a également montré une amélioration de l'engagement professionnel des femmes à ces niveaux au fil du temps. L'analyse thématique des réponses à l'enquête sur l'équité (n = 71 répondants; 83 % de femmes ; 9,7 % de taux de réponse parmi les membres féminins de la Société canadienne de cardiologie) a permis de dégager les thèmes suivants au sein du système socio-écologique : désir de signaler les inégalités par rapport à la volonté de maintenir cap précis (au niveau individuel); désir de soutien social et de mentorat et défis liés à la double responsabilité (au niveau interpersonnel); préoccupations concernant les cliques exclusives et désir de respect et d'opportunité (au niveau organisationnel); et sensibilisation et actions accrues pour surmonter les obstacles institutionnels et les niveaux de responsabilité (au niveau sociétal).

Conclusions : Bien que les femmes soient confrontées à des défis et restent sous-représentées dans les domaines de la médecine, de la chirurgie et des sciences CV, cette étude met en évidence les possibilités d'améliorer l'accès des stagiaires féminines et des professionnelles de la médecine, de la chirurgie et de la recherche à la formation spécialisée en cardiologie, à l'avancement de carrière, au rôle de direction et à la recherche.

Methods

The scope of our analysis was largely restricted to sex (biological attributes), with heteronormative binary groups defined as women and men, whereas gender (societal roles, behaviours, activities) was not thoroughly analyzed in the current study. We conducted an environmental scan of the Canadian CV landscape, which included (i) an examination of the proportion of female representation within a number of Canadian CV societies, institutions, and databases (see below) during CV training, leadership opportunities, or other career-related activities, and (ii) an equity survey. We assert that sex-based equity in CV medicine, surgery, and science would include approximately 50% women, given the current proportion of female medical and graduate students.

Organizational data source and analysis

We identified female sex composition as outlined from the following organizations in 2019, unless otherwise stated: the Consolidated Annual Performance and Evaluation Report (2006–2018) for medical subspecialty enrollment from Canadian Residency Matching Service (CaRMS); the Canadian Medical Association (https://www.cma.ca/sites/default/files/2019-11/2019-06-spec-sex_0.pdf) for physician specialty distribution; the Royal College of Physicians and Surgeons of Canada (www.royalcollege.ca/) for the listing of program directors for CV medical and surgical training programs; the Canadian Cardiovascular Society (CCS) and subspecialty affiliate societies for leadership roles or advanced fellowship trainees (personal correspondences, 2016–2019 [see *Acknowledgements* section]), as well as CCS guidelines for authorship of primary and secondary writing panels (pre-2000–2018; <https://www.ccs.ca/en/guidelines>); the Canadian Cardiovascular Congress (CCC; 2014–2018) for panelists, awardees, and leadership roles; the Canadian Institutes of Health Research (CIHR; 2013–2018; <http://www.cihr-irsc.gc.ca/>) for CV grant review committee members; the *Canadian Journal of Cardiology* (CJC; <https://www.onlincejc.ca/>)

and *CJC Open* (<https://www.cjopen.ca/>) for editorial board representation; and major Canadian academic institutions for local divisional leadership roles. For the purposes of reporting differences between the terms “invasive” and “noninvasive” in this article, the following applies: cardiac surgery and cardiology are considered “invasive” CV specialties, whereas critical care cardiology, electrophysiology, and interventional cardiology are considered “invasive” cardiology subspecialties. Female sex was obtained from the above-stated source data if reported, or identified by using pictures provided on institutional websites or by documented pronoun use where available if not reported; the analyses were verified separately by at least 2 individuals (L.B., V.K.R., and/or J.C.).

An equity survey analysis

The equity survey consisted of a total of 11 items: Part A had 6 sociodemographic checklist-type questions taken from the CCS Data Dictionary.¹⁵ Part B had 5 open-ended investigator-developed questions that addressed perceived inequities during training, leadership, or career-oriented activities related to sex (Table 1; Supplemental Appendix S1). Institutional review board approval was obtained to conduct the survey (REB#18-259). The survey was administered initially in person at the CCC 2018 Women in Cardiovascular Medicine and Science workshop and subsequently developed in Qualtrics software (Qualtrics, Provo, UT) and sent via e-mail to CCS membership with 3 separate reminder e-mails between October 2018 and March 2019.¹⁶ The CCS membership includes clinical and basic research trainees and scientists, clinicians (eg, cardiologists, cardiac surgeons), and clinician-scientists. Braun and Clarke’s 6-phased reflexive thematic content analysis approach was used to identify, analyze, and report the themes evolving from the survey responses¹⁷ into a socio-ecological framework (ie, individual, relationship/interpersonal, community/organizational, and societal/public policy). Systematic coding and categorization of survey transcripts was conducted through repeated readings of the transcripts (L.B.), and line-by-line analysis of the text by 2 independent coders (L.B. and V.K.R.). Coding consensus was reached through discussion among the authors (L.B., V.K.R., and J.C.). Significant themes evolved through this process, and data that supported a particular idea/theme were identified.

Results

Organizational data analysis

Supplemental Table S1 highlights the number of female trainees enrolled annually within various Canadian medical and surgical subspecialties from 2006 to 2018 as reported by the Consolidated Annual Performance and Evaluation Report. We found that a lower proportion of female trainees entered cardiac surgery or cardiac-related medical specialties (eg, adult cardiology or critical care) relative to their male colleagues (Supplemental Fig. S1; Supplemental Table S1). Similar trends were observed in invasive cardiology subspecialties, including electrophysiology, interventional cardiology, and critical care (Supplemental Table S2). In 2019, the Canadian Medical Association reported that less

than 30% of all physicians were female in the following CV-related specialties: cardiac surgery (9%; n = 13 of 149); cardiothoracic surgery (11%; n = 11 of 103); cardiology (22%; n = 334 of 1507); and critical care medicine (29%; n = 140 of 491). The Royal College of Physicians and Surgeons of Canada noted that, overall, 33% (n = 12 of 36) of all CV residency training program directors in 2019 were women: 50% (n = 4 of 8) for pediatric cardiology; 44% (n = 7 of 16) for adult cardiology; and 8% (n = 1 of 13) for cardiac surgery training programs. Among academic departmental leadership across Canada in 2019, 21% (n = 9 of 42; 6 of 15 for pediatric cardiology and 3 of 14 for adult cardiology) of division heads were women. There were no female (n = 0 of 13) division heads for cardiac surgery programs at major Canadian academic centers.

The CCS reported 3 female presidents (8%; n = 3 of 38; years 1999–2002, 2014–2016, and 2016–2018; Supplemental Table S3), and 2 Scientific Program Committee Chairs (years 2016–2018, and 2019–2020) who were women, within its 72-year existence. Supplemental Table S3 notes similar disparities in biological sex representation among the CCS subspecialty affiliates, whereby 6 of the 11 affiliates have had female presidents since their inception (14%; n = 11 of 77). The Canadian Pediatric Cardiology Association had its first of 5 female presidents in 2004. The Canadian Society for Echocardiography had its sole female president in 2006. Thereafter, the Canadian Cardiac Transplant Network Society and the Cardiovascular Nuclear and CT Imaging Society had their first female president (2 and 1, respectively, to date) serve in 2010. The Adult Congenital Heart Network and the Canadian Heart Failure Society inaugurated their first and sole female president to date in 2016 and 2018, respectively. Supplemental Tables S4–S6 depict the number of women involved in CCS or CIHR-affiliated leadership activities. The 5-year composition of women on the CCC Scientific Program Committee (23%; n = 32 of 137) and Major Symposia panels (30%; n = 43 of 142) has been ≤ 30% from 2014 to 2018 (Fig. 1, A and B; Supplemental Table S4). Moreover, the percentage of women who served as chair or as members of either the primary and secondary panels of any of the CCS Guidelines has also been < 30% (Fig. 2; Supplemental Table S5). These findings are consistent with the data from CIHR CV-related grant review panels from 2013 to 2018, which showed that < 18% (n = 11 of 60) of chairs, scientific officers, and committee members were women (Fig. 1C; Supplemental Table S6). With respect to editorial board representation within the Canadian CV landscape, there is one female associate editor at the *CJC*, who also became the inaugural editor-in-chief of *CJC Open* in 2019. The overall female editorial board membership for *CJC* and *CJC Open* is currently 11% (n = 17 of 159) and 37% (n = 11 of 30), respectively. Among trainees, however, 45% (n = 5 of 11) of the *CJC* trainee editorial board members are women. Moreover, 58% of all CCS Have a Heart Bursary awardees in 2019 were women (Supplemental Table S4).

Equity survey analysis

Seventy-one respondents (83% female, 65% Caucasian) of 2401 documented CCS members (607 women vs 1794 men) completed the survey. The response rate was higher among

women than men (9.7% vs 0.7%). Respondents primarily identified their race as Caucasian (65%), Chinese (9%), and South East Asian (4%), with few participants (1%) identifying as Aboriginal, Arab, West Asian, Black, Korean, Latin American, or South Asian. Participants included both trainees (51%) and those with clinical or research appointments (49%); 39% identified having caregiving responsibilities (with a Likert scale reporting the most common frequency of 4 of 6, with 0 = no responsibility and 6 = total responsibility). Most respondents were engaged in leadership in some capacity (88%), with the majority of leadership positions being as:

workshop members or chairs of societies and meetings (15%), program directors (14%), academic committee members (14%), grant reviewers (5%), and department heads (3%). **Table 1** summarizes the qualitative results into the various categories of the socio-ecological framework. Several challenges were highlighted by the respondents that potentially impacted career development: dual responsibilities of balancing both personal and work commitments, desire for respect and opportunity, an exclusionary clique (ie, club-like) sentiment, and institutional barriers. Respondents were asked what potential strategies were or could be used to overcome

Table 1. Socio-ecological model: strategies for reducing barriers to sex- and gender-based inequity

Socio-ecological framework	Relevant themes identified in equity survey with representative quote	Prevention strategy for inequity
Individual	Reporting inequities Staying the course	<ul style="list-style-type: none"> ■ Training to overcome implicit bias ■ Promote sex- and gender-neutral professional culture
	<p>“Reported it to senior staff.”</p> <p>“Ignoring those attitudes and to work hard as if they were not there.”</p>	
Relationship / interpersonal	Seeking social support and mentorship	<ul style="list-style-type: none"> ■ Foster enhanced representation of women in CV medicine ■ Encourage sponsorship and mentorship of female trainees into CV medicine, surgery, and science
	Dual responsibilities	
Community/ organizational	Exclusionary cliques	<ul style="list-style-type: none"> ■ Enhance family, work, and social support networks ■ Adoption of the “3GD” principles for all task forces (leadership, guidelines, workshops, panels, etc.) ■ Promote inclusivity of all women in CV medicine ■ Effect institutional policies for work—life balance and sex- and gender-neutral culture
	Desire for respect and opportunity	
Societal/ public policy	Institutional barriers	<ul style="list-style-type: none"> ■ Mechanism for safe reporting without retribution ■ Address health, economic, educational, and social policies that create a gender gap by effecting change to reduce these inequities
	Accountability	

CV, cardiovascular; 3DG, gender, generation, geography and discipline.

these challenges, and these included staying the course, seeking social support, and reporting gender inequities. The respondents also discussed the desire for new initiatives to enhance their opportunities for engagement of career development activities, including enhanced mentorship, structural changes to support work partnerships, policies for enhancing diversity and inclusion, and mechanisms to improve accountability for workplace harassment (eg, structural changes and new policies that protect victims of harassment and discriminatory actions).

Discussion

The primary findings of our environmental scan highlight a lower percentage of women in CV-based fields as trainees advance along their medical, surgical, and research careers (Figs. 1 and 2; Supplemental Fig. S1). Despite the sex parity seen at medical and graduate school entry in most but not all Canadian academic institutions, with women representing 56% of matriculants into Canadian schools in 2018,¹⁸ there has been a pervasive and persistent lack of female representation in adult cardiology and cardiac surgery, from entry into fellowship training through professional career advancement into leadership positions. In this study, we found that 12%–33% of women pursued CV residency training programs in 2006–2018, and 18% of female physicians were documented as practicing in CV specialties in 2019. The percentage of female trainees pursuing a CV specialty increased 265% from 2006 (14.3%) to 2018 (37.9%). Further, 33% of program directors, and 21% of division heads are female for these CV programs. Among most of the professional societies, granting agencies, and journal editorial boards within the Canadian CV landscape, there was typically 30% or less female representation in a membership and/or leadership capacity. This is in

keeping with similarly reported international trends from other continents, such as the Americas, Europe, Asia, and Australia.^{6,9,19} Potential reasons for these differences are varied. Family responsibilities can limit geographic mobility and influence career decisions; 39% of our predominantly female respondents stressed a need to undertake significant caregiving roles. A recent survey of 1221 female physicians' experiences with elected leadership positions highlights the further barriers of lack of protected time, support, experience, mentorship, and sponsorship.²⁰ Lewiss et al.²¹ discuss the consequences of micro-inequities, implicit and organizational biases, and most importantly, the lack of sponsorship that render women invisible as they gain seniority within their careers. In a formal review of successful CIHR grant applications (23,918 applications from 7093 applicants, 2011–2016), grant funding inequities were observed beyond the quality of the research grant applications submitted by female principal investigators.⁴ In a separate analysis by Burns et al., fewer women were reported to have achieved success over a 15-year timeframe with CIHR personnel awards (risk ratio 0.75, $P > 0.001$) and operating grants (risk ratio 0.89, $P < 0.001$); they also received lower funding amounts per CIHR grant, if awarded.²² Important to note is that there was no interaction effect of sex and time on award success. These sex-based differences can collectively reduce opportunities for female engagement both during and/or after formal training in CV-related disciplines for career progress.

We also identified examples of effective female leadership and inclusion in our broad-scoping analysis of the Canadian CV landscape. Improving access and delivery of care to Canadian women on the basis of their sex and/or gender differences in CV health and risk factors have been documented²³ and further championed by female physicians with the

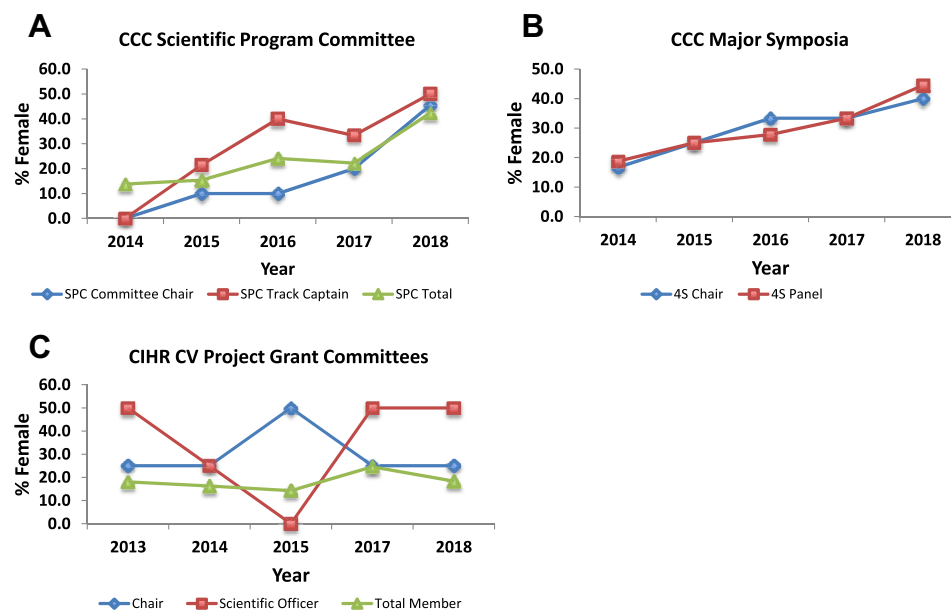


Figure 1. Sex-based analysis of Canadian cardiovascular (CV) meeting and grant review panels. The sex composition of the (A) Canadian Cardiovascular Congress (CCC) Scientific Program Committee (SPC), (B) CCC Major Symposia (4S) panel, and the (C) Canadian Institutes of Health Research (CIHR) cardiovascular-related research grant review panels is shown. Thirty percent or fewer females are members of these meeting programming and research grant review panels.

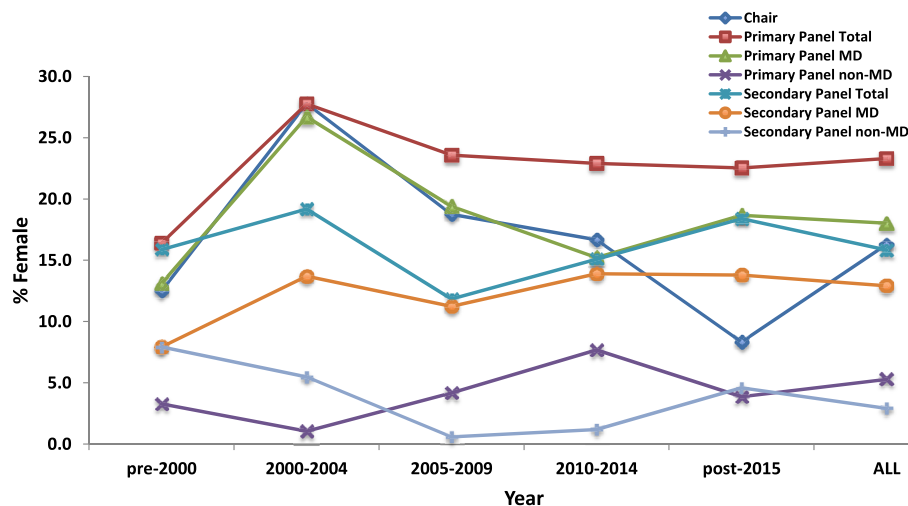


Figure 2. Sex-based analysis of the Canadian Cardiovascular Society (CCS) guidelines-writing panels. The sex composition of the CCS guidelines-writing panels is shown. Twenty-five percent or fewer women are members of the CCS guidelines-writing committees as chairs or as primary or secondary panelists.

Canadian Women’s Heart Health Centre and Annual Summit (<https://cwhhc.ottawaheart.ca/summit>) and the Heart and Stroke Women’s Campaign (<https://www.heartandstroke.ca/women>). Moreover, the CCS guidelines trialed the inclusion of biological sex-specific recommendations for the recent update on care of patients with ST-elevation myocardial infarction²⁴; an identifiable gap—with a lack of sex- and gender-related outcomes—prompted an initiative to include specific recommendations in future clinical practice guidelines and updates. Additionally, there has been increasing diversity on the editorial boards of our current Canadian CV journals, especially in those opportunities afforded to trainee editorial board members, of whom 45% are women. At the CCS, there has been a concerted effort to develop a working group to support women in the CV forum (eg, the 2019 media campaign, http://www.ccs.ca/images/Members_En/Womens_booklet.pdf, to promote networking by showcasing CV women) and to introduce the “3G” principles to mitigate personnel gaps in “gender (sex), generation, and geography” for leadership positions and career advancement opportunities. Enhanced diversity has the potential to translate into career progression and leadership opportunities for women. Future directions include exploring institutional mechanisms that can increase capacity for entry into the CV forum, and advancement through targeted sponsorship. The first step toward this goal would be to determine pragmatic solutions for the factors that influence career options.

Using the socio-ecological framework, our analyses enabled us to explore in greater depth some of the personal and environmental factors that determine behaviours related to equity and inclusion, and they may inform knowledge-translation initiatives, including research, to close the equity gap (Table 1). Although themes have been identified from an individual to organizational and societal level, Kang et al.² have argued that we must shift from a “singular focus on interventions aimed at targeting individual attitudes and behaviour to more comprehensive interventions that address structural and systemic changes.” Our study participants similarly acknowledged that systemic changes are required,

with increased accountability to uphold equitable behaviours/policies (from repercussions for discriminatory behaviours to ensuring pay equity) and recognition for merit-based activities (including mentorship and teaching activities). There is also a need for more granular data on why fewer women enter CV specialties compared with other specialties such as pediatrics and obstetrics/gynecology. It is plausible that sensed micro-aggressions and unconscious biases may not be as commonly perceived in these other specialties in which women predominate. Sharma et al.²⁵ recently identified 10 key recommendations for career enhancement of woman in cardiology, many of which include structural and systemic changes. A few examples of structural and systemic changes that are not currently standard practice in Canada (but have been used to varying extent here and abroad) include the use of implicit bias training for all appointments (eg, clinical and research positions), the development of a “career advising program” (eg, providing women with formalized access to senior leaders and professional networks often beneficial for advancement into cardiology),²⁶ and the possibility of part-time and/or “job-sharing” in CV medicine to accommodate those individuals who may have other responsibilities (eg, caregiving of elderly relatives and/or children).²⁷ Silver et al.²⁸ highlighted the correlation of diversity-related workforce disparities with physician attrition and patient care outcomes. Moreover, patient–physician sex concordance has been associated with improved outcomes for women with heart disease, especially if they require cardiac interventions.^{29,30} The CCS and its affiliate societies that are part of the new “One Heart Team” approach, which aims to improve collaborative efforts among these groups, will likely need to play an integral role in advocating for health policy to inform institutional mechanisms that enhance sex and gender equity, diversity, and patient–physician concordance on a larger scale.

Limitations

The present study does not explore all aspects of sexuality, gender identity, or gender and gender roles; thus, future

research and analysis are warranted. Additionally, although the equity survey was launched at the CCC 2018 and also distributed electronically by CCS administration, we acknowledge a low response among men, a majority of whom did not indicate experiencing any inequities. Nonetheless, the small sample of men may influence the generalizability of our findings. This limitation points to the importance of male participation in the surveys and discussion regarding sex and gender equity, as future efforts require both male and female participation to advance and support equitable policies and initiatives. There was a disproportionately high response from women for this voluntary survey, which may have contributed to a response bias, despite the significantly lower percentage of female vs male CCS members. The equity survey also did not ask what respondents would consider equitable representation. Although only 25% of CCS members identify as female, this percentage likely underestimates equitable representation, as a greater number of non-CCS members may be women who practice CV medicine, surgery, and science in community settings. Nonetheless, the respondents included an equal proportion of women who identified as either a “trainee” or as having a “full-time clinical (or research) appointment.”

As evidenced in our equity survey (see sample quotes in Table 1), women still encounter workplace harassment, intimidation, and bias in the pursuit of a career in CV medicine, surgery, and/or science within Canada.^{1,31,32} The open-ended, qualitative responses provide an in-depth insight into the cumulative career disadvantage that women continually encounter at every level of training and career (including in leadership advancement) and must be addressed among individuals, institutions, and the broader medical and scientific communities.³³ However, we note that although the survey aimed to capture current experiences regarding training and work in CV medicine, surgery, and science, the questions did not focus on past experiences that more-senior staff may have already overcome. New policies are rapidly required for our current generation of trainees to have equitable opportunities to be successful in a CV career.

Conclusions

A number of gaps in sex and gender equity have been identified, which begin at entry into the CV landscape. In Canada, women and men in CV medicine, surgery, and science have asserted that strategies around representation (#ifyoucanseeit, #youcanbeit; #ILooklikeacardiologist; and #ILookLikeASurgeon), opportunities for respect and sponsorship, and accountability are required to help with the recruitment, success, and retention of women within the CV community. There is a great opportunity to move forward with this knowledge to promote a wave of change focused on advancing equity for the purpose of improving the workplace environment and patient care within the CV forum.

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Disclosures

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Supplementary Material

To access the supplementary material accompanying this article, visit *CJC Open* at <https://www.cjopen.ca/> and at <https://doi.org/10.1016/j.cjco.2020.06.016>.