



Original Article

Cardiovascular Physicians, Scientists, and Trainees Balancing Work and Caregiving Responsibilities in the COVID-19 Era: Sex and Race-Based Inequities

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ABSTRACT

Background: The ongoing COVID-19 pandemic has exposed a work-life (im)balance that has been present but not openly discussed in medicine, surgery, and science for decades. The pandemic has exposed inequities in existing institutional structure and policies concerning clinical workload, research productivity, and/or teaching excellence inadvertently privileging those who do not have significant caregiving responsibilities or those who have the resources to pay for their management.

Methods: We sought to identify the challenges facing multidisciplinary faculty and trainees with dependents, and highlight a number of possible strategies to address challenges in work-life (im)balance.

RÉSUMÉ

Contexte : La pandémie de COVID-19 a mis en lumière le déséquilibre entre travail et vie personnelle qui règne depuis des décennies dans les milieux de la médecine, de la chirurgie et des sciences, mais dont on ne parlait pas ouvertement. La pandémie a en effet mis au jour des iniquités dans la structure et les politiques des établissements en matière de charge de travail clinique, de productivité de la recherche et d'excellence en enseignement, qui favorisent par inadvertance les personnes qui n'ont pas de responsabilités familiales importantes ou qui ont les ressources nécessaires pour leur prise en charge.

Méthodologie : Nous avons tenté de cerner les difficultés auxquelles font face les enseignants multidisciplinaires et les stagiaires ayant des

The COVID-19 pandemic has exposed a work-life (im)balance that has been neglected in the broader Canadian

workforce for decades, spanning across the lifespan from childcare to eldercare responsibilities. In fact, nearly one-third of Canadian women have considered leaving their jobs to manage the nonwork-related responsibilities.¹ In medicine and science, there is an expectation that work supersedes all other needs and therefore multidisciplinary faculty and trainees are silently encouraged to place work ahead of all nonwork-related or personal responsibilities, such as managing family needs and personal well-being. Although external caregiving supports for children, those with mental and/or physical disabilities, and elderly family members are largely unpredictable as a result of COVID-19, many have been left with the insurmountable challenge of forging ahead with work and increased caregiving responsibilities (inclusive of

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See page 630 for disclosure information.

Results: To date, there are no Canadian-based data to quantify the physical and mental effect of COVID-19 on health care workers, multidisciplinary faculty, and trainees. As the pandemic evolves, formal strategies should be discussed with an intersectional lens to promote equity in the workforce, including (but not limited to): (1) the inclusion of broad representation (including equal representation of women and other marginalized persons) in institutional-based pandemic response and recovery planning and decision-making; (2) an evaluation (eg, institutional-led survey) of the effect of the pandemic on work-life balance; (3) the establishment of formal dialogue (eg, workshops, training, and media campaigns) to normalize coexistence of work and caregiving responsibilities and to remove stigma of gender roles; (4) a reevaluation of workload and promotion reviews; and (5) the development of formal mentorship programs to support faculty and trainees.

Conclusions: We believe that a multistrategy approach needs to be considered by stakeholders (including policy-makers, institutions, and individuals) to create sustainable working conditions during and beyond this pandemic.

caregiving and household responsibilities and supervision of dependents enrolled in virtual and/or hybrid learning environments), each on a full-time, continuous basis. This has led to the realization that existing institutional structures and expectations concerning clinical workload, research productivity, and/or teaching excellence inadvertently privilege those who do not have significant caregiving responsibilities or who have the resources to manage and choose to rely on them (eg, individuals in medicine and science with higher salaries might be able to pay for additional supports). Therefore, we sought to highlight the challenges facing multidisciplinary faculty and trainees (eg, fellows, residents, graduate students) with dependents, while also providing a number of strategies for adjustment as this pandemic evolves. Additional advocacy work is required to drive health systems change and public awareness.

Clinical staff, researchers, and trainees working in Canadian institutions have evolved and responded to the pandemic. There has been tremendous physical and psychological stress associated with work responsibilities, ranging from redeployment from their usual jobs to COVID-19 care and acquiring knowledge regarding the effect of COVID-19, to issues regarding access to personal protective equipment and adoption of new digital technologies, as well as access to childcare or eldercare despite restrictions and/or closures in the community. Faculty and trainees working at Canadian universities have also faced other challenges with research laboratory closures and a shift to teaching in an online environment. In several Canadian provinces, faculty have been advised that many nonclinical work responsibilities (eg, teaching, advising, committee, and other service work) will continue remotely in the upcoming year as an effort to reduce

personnes à charge, et nous proposons un certain nombre de stratégies possibles pour faciliter la conciliation travail-vie personnelle.

Résultats : À ce jour, il n'existe pas de données canadiennes permettant de quantifier les répercussions physiques et mentales de la pandémie de COVID-19 sur les travailleurs de la santé, les enseignants multidisciplinaires et les stagiaires. Au fil de l'évolution de la pandémie, il conviendrait de formuler des stratégies officielles à la lumière des commentaires d'intervenants des différents secteurs concernés, afin de promouvoir l'équilibre au sein des effectifs; ces stratégies pourraient notamment inclure ce qui suit (sans toutefois s'y limiter) : 1) l'inclusion d'une vaste représentation (y compris une représentation égale des femmes et des autres personnes marginalisées) pour la réponse à la pandémie dans les établissements, la planification du rétablissement et la prise de décisions; 2) une évaluation (p. ex. au moyen d'un sondage mené sous la direction des établissements) des répercussions de la pandémie sur la conciliation travail-vie personnelle; 3) l'établissement d'un dialogue formel (p. ex. ateliers, activités de formation et campagnes dans les médias) afin de normaliser la coexistence des responsabilités professionnelles et familiales et d'éliminer la stigmatisation associée aux rôles des sexes; 4) une réévaluation de la charge de travail et des promotions; et 5) la mise sur pied de programmes formels de mentorat pour soutenir les enseignants et les stagiaires.

Conclusions : Nous croyons que les intervenants (décideurs, établissements et personnes) devraient envisager une approche multistratégie afin d'instaurer des conditions de travail viables pendant la pandémie et par la suite.

the spread of COVID-19. Although there are some examples that Canadian institutions recognize this issue (eg, e-mail communications and online resources), the typical support systems on which faculty and trainees rely for dependents (eg, access to in-person community programs, formal schooling, domestic workers) have often been interrupted, remain precarious with no end in sight, and have no “safety net” by which to address this imbalance. There are other systemic challenges that have been highlighted by the pandemic—for example, part-time employees might not have access to certain institutional resources only available to full-time workers.

This work-life (im)balance has been further outlined in the media and scientific journals.^{2,3} Although precarious childcare, eldercare, or care for those with disabilities presents many personal challenges for faculty and trainees, a professional career crisis can be anticipated for individuals who are disproportionately burdened with these caregiving responsibilities and have a lower socioeconomic status (including single parents, women, trainees, and those who earn a lower wage in their households). Notably, the United Nations recently published a policy briefing on this topic wherein they assert “across every sphere, from health to the economy, security to social protection, the impacts of COVID-19 are exacerbated for women and girls simply by virtue of their sex.”⁴ To our knowledge, there are no published data on the physical and mental effect of COVID-19 on multidisciplinary faculty and trainees in Canada.

We recently delineated the historical context and present state of affairs relevant to sex, gender, and equity within cardiovascular medicine, surgery, and science training and careers in Canada before the COVID-19 pandemic.⁵ Although the

Table 1. Socioecological model to address work-life (im)balance challenges in the COVID-19 pandemic

Level	Possible strategies and timeline for implementation	Examples of implemented strategies
Individual	<ul style="list-style-type: none"> • Set appropriate expectations/goals and openly communicate what can be accomplished (immediate) • Strategically advocate for resources necessary to optimize physical and mental health well-being in an increasingly complex work-life environment (immediate) 	<ul style="list-style-type: none"> • Vision board or idea box where individuals can highlight goals or resource needs • Kudos board where individuals can acknowledge colleagues' contributions
Interpersonal	<ul style="list-style-type: none"> • Initiation of mentorship and social/peer support among colleagues, initiated by division heads and/or senior faculty, particularly for vulnerable groups (immediate; eg, scheduled virtual meetings for early career investigators with care of dependents responsibilities)² • Equal encouragement of mentorship from all faculty to not overburden women faculty (immediate; especially during the pandemic)² • Use social support from family and/or friends (where possible, either in person or using virtual platforms) to promote a culture of collegiality and professionalism (immediate) 	<ul style="list-style-type: none"> • Workplace mentorship programs with diverse mentors • Kudos board where individuals can acknowledge colleagues' contributions • Departmental meetings or retreats with colleagues to reflect on successes and challenges of past, present, and future
Organizational	<ul style="list-style-type: none"> • Ensure broad, equal representation (including women and marginalized persons) in pandemic response and recovery planning and decision-making⁴ (< 1 year) • Sliding extensions/delays for performance reviews (eg, tenure-track and/or continuing reviews)² (< 1 year) • Revisions to merit, promotion, and/or evaluation processes (< 1 year) • Prioritize office space and appropriate digital infrastructure and training to accommodate employees who need to attend virtual clinics, conduct lab-based research, and/or record lectures in a quiet environment (immediate) • Reevaluation and possible reduction of clinical, research, service, and/or teaching expectations (< 1 year) • Implementation of flexible work hours around caregiving and/or other responsibilities (eg, no meetings during typical meal time), without need to make up lost time (immediate) • Assistance with wellness resources by creating a network or online platform to connect employees with a variety of options for caregiving (childcare, eldercare, day camps), in-home cleaning and delivery services (immediate) • Introduction of paid reductions in working time and/or work-sharing for workers with caregiving responsibilities⁴ (< 1 year) 	<ul style="list-style-type: none"> • Implementation of programs for improved access to parking and childcare services during pandemic • CCS COVID-19 Rapid Response Team consisted of all affiliates, and webinar series strived to contain representation by gender, geography, generation, and discipline • Canadian Cardiovascular Congress trainee and main programming work to ensure gender, geography, generation, and discipline are promoted • CIHR extended eligibility criteria for award applications, length of stipend funding for graduate students because of COVID-19 • CIHR granting competitions (beginning in Fall 2020) to include a section for individuals to identify how the pandemic has delayed productivity • Use of digital technology platforms were allowed in the care of patients with reimbursement • Workload reduction requests led by university faculty unions • TAHSN-affiliated institutions (including Toronto area hospitals) to recognize and account for female staff who might have differences in productivity evident on performance and tenure review
Community	<ul style="list-style-type: none"> • Partnership with societies (including affiliate groups and those external to medicine) to discuss and establish task forces to support members via a race-, ethnicity-, gender-, and disability-informed accommodation policy for those affected by caregiving responsibilities⁶ (< 1 year) • Conduct an assessment to understand the effect of the COVID-19 pandemic on women and marginalized persons who might be disproportionately affected (< 1 year) • Formal dialogue to normalize coexistence of work and caregiving responsibilities (eg, CCS media campaign on women in the cardiovascular forum, and CCS workshops on gender equity and diversity; > 1 year) 	<ul style="list-style-type: none"> • CCS Cardiovascular Women's campaign to profile their work and create a repository for networking and mentorship • CCS Equity and Diversity Initiatives to improve mentoring and sponsorship of women and marginalized individuals
Public policy	<ul style="list-style-type: none"> • Establishment of safe, reliable caregiving options and better integration of health, social care, and educational needs⁶ (< 1 year) • Provide additional bonuses, subsidies, and vouchers to hire caregiving services for essential workers (< 1 year) • All funding agencies (tri-council and others) extending the length of eligibility for trainees and early career researcher categories for those with significant interruptions/delays or study program cancellations from 5 to 10 years² (< 1 year) • Ensure broad, equal representation (including of women and marginalized persons) in pandemic response and recovery planning and decision-making⁴ (< 1 year) 	<ul style="list-style-type: none"> • Government funding for hiring of educators and other essential workers to address COVID-19 • Government funding of a national childcare program • CIHR implemented sex and gender training for researchers submitting grants • CIHR targeted awards for sex- and gender-based analyses • CIHR created an early career category for grants and awards

CCS, Canadian Cardiovascular Society; CIHR, Canadian Institutes of Health Research; TAHSN, Toronto Academic Health Science Network.

effects of the pandemic on equity within our discipline will not be fully realized for several years, individuals who experience a disproportionate burden with balancing work and caregiving responsibilities might reconsider their clinical work or training, research, and/or teaching obligations. As such, the progress that

has been identified in the equity and advancement of women and marginalized persons in cardiovascular medicine, surgery, and science in Canada (eg, increased female trainee enrollment into cardiovascular training programs, and leadership opportunities for women within the Canadian Cardiovascular Society

and among its affiliates)⁵ might be lost within this pandemic response. The “leaky pipeline” might be exacerbated with fewer women and marginalized persons choosing to pursue academic cardiovascular careers and/or further research or training fellowships, in addition to fewer available clinical, academic faculty, or training positions (eg, hiring freezes, delayed retirement, lack of sponsorship, loss of clinical volume because of COVID-19 considerations or fallout specifically influencing procedural-dependent training).² These career advancement opportunities and highly regarded prerequisites to be successful in academic cardiovascular medicine, surgery, and science further compete with a women’s reproductive period, and as a result, might create a “maternal wall” to career success.³ Emerging short-term data also suggest that women (and presumably other marginalized persons) in academia have submitted fewer publications and funding applications since the pandemic began,³ which might coincide with their traditionally higher teaching, committee, and/or service workloads. Moreover, there is growing awareness of intersectionality and the resultant disproportionate burden of the pandemic on racialized communities, and in particular women from those communities.⁶

The COVID-19 pandemic has provided us with a unique opportunity to reflect on current norms around work-life balance in medicine, surgery, and science, and enact new strategies to achieve an improved work-life balance. For instance, the profound changes in health care delivery brought on by the COVID-19 pandemic might also have some advantages for physicians who balance higher caregiving demands with virtual meetings and patient visits becoming much more common and acceptable. Moreover, many Canadian institutions have provided accommodations for annual reviews and review of continuing and/or tenure-track appointments, yet have failed to acknowledge and act to address larger, ongoing concerns of managing workload and caregiving responsibilities. Using a socioecological approach, there are several actionable strategies that should be considered to openly address the challenges associated with balancing work and caregiving responsibilities (Table 1). A formalized policy at the institutional, provincial, and federal level is ultimately required to:

1. Establish provisions for multidisciplinary faculty and trainees should typical support systems (eg, childcare, eldercare, schooling, and employment of domestic worker) remain restricted and/or unavailable because of the pandemic. These provisions are especially needed for trainees as well as nonclinical faculty for whom socioeconomic status might be a further disadvantage compared with clinical faculty with full-time appointments.
2. Prevent inequities, implicit bias, and vulnerabilities that might develop if faculty, staff, and students are left to negotiate their work-related responsibilities on an individual basis. These policies are critical for trainees and early career professionals who might perceive a power imbalance in discussing work vs caregiving responsibilities with senior faculty and administration.
3. Ensure that workload assignments and access to resources (eg, on-site work space and/or childcare spaces) are equitable.
4. Adopt an intersectional lens in response to any pandemic measures, and to recognize that not all persons, even

women from historically marginalized communities, are affected equally.⁶

Additional research is urgently needed to understand and address the possible inequities and strategies outlined in this article. Institutions (via grant management offices) and funding agencies (eg, the Canadian Institutes of Health Research) should publicly report data on the number of grant applications submitted according to demographic characteristics of the principal applicant (eg, career stage, sex, and race). A needs assessment survey completed by faculty and trainees, inclusive of these aforementioned demographic characteristics, might further inform medium- (< 1 year) and longer- (> 1 year) term strategies at an organizational, community, and public policy level.

In conclusion, the COVID-19 pandemic has amplified preexisting inequities for those pursuing careers in medicine, surgery, and science, along with the challenges of maintaining a work-life balance, particularly for those with caregiving responsibilities. This is one of several economic and social crises facing institutions across Canada. We encourage the collaboration of the federal and provincial governments, Canadian institutions, specialty societies, and individuals to address the challenges faced by multidisciplinary faculty and trainees, such that we can “re-set” and establish more sustainable working conditions that embrace greater work-life balance.

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Disclosures

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