

Overcoming COVID-19

Strategies to Mitigate the Perpetuated Gender Achievement Gap

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Sex inequity in academic achievement was well documented before the COVID-19 pandemic, and evolving data suggest that women in academic surgery are disproportionately disadvantaged by the pandemic. This perspective piece reviews currently accepted solutions to the sex achievement gap, with their associated shortcomings. We also propose innovative strategies to overcoming barriers to sex equity in academic medicine that broadly fall into three categories: strategies to mitigate inequitable caregiving responsibilities, strategies to reduce cognitive load, and strategies to value uncompensated, impactful work. These approaches address inequities at the system-level, as opposed to the individual-level, lifting the burden of changing the system from women.

Keywords: academic advancement, COVID-19, sex equity

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The 2020 COVID-19 pandemic has impacted the entire academic medicine community with unprecedented effects on every aspect of faculty life; the disproportionate burden on women has been significant. Sex inequity in academic achievement was well documented before the pandemic.¹ Evolving data suggest that women in the US workforce and academic surgery are disproportionately disadvantaged by this pandemic.^{2–6} Women faculty often navigate heavier teaching and service responsibilities, while bearing the weight of additional administrative responsibilities during this crisis.⁷ Importantly, these efforts often are not valued classically by academic institutions when awarding tenure and promotion. Moreover, women often are balancing increased domestic responsibilities.^{8,9} The pandemic has further perpetuated the sex achievement gap, including disparities in publications, funding, promotion in rank and leadership.² This experience must be factored into the standard metrics that Universities utilize when evaluating, rewarding, and promoting faculty. Failure to directly address these downstream effects of COVID-19 exacerbates threats to sex equity in academic surgery.

THE PROBLEM

Though there has been steady progress toward sex equity in academic surgery, a critical need remains to address achievement barriers. Academic promotion rates remain historically low, and women and underrepresented minority groups are far less likely to advance to leadership or decanal positions.¹⁰ While many academic medical centers have developed strategies to overcome inequities in the professional advancement of women, these strategies may

not encompass the more urgent inequitable effects of the COVID-19 crisis.¹¹ Moreover, during crises, biased decision-making may be more frequently implemented, and equity initiatives deprioritized and potentially reversed.

Studies have documented that women experience work–home conflict at greater rates than men, in part due to multiple sex differences in domestic and parenting responsibilities.¹² Younger women surgeons may in fact be the highest risk impacted cohort during this pandemic, particularly those with child and family care responsibilities as women with younger children have more home responsibilities, and are more likely to be in a dual-career household posing greater challenges balancing work and home responsibilities and perhaps more often facing conflict between their own and their partner's career advancement. This conflict has been exacerbated by escalated home responsibilities, eldercare and childcare needs and further compounded by a full collapse of infrastructure. Many academic women surgeons responsibly craft and maintain intentionally layered infrastructure to support domestic functions, a process that requires significant effort and investment. During the pandemic, this infrastructure totally collapsed. Surgeons with children are particularly at risk because nearly all early childhood centers and schools have moved to virtual learning environments prompting many parents in the workforce to prioritize family responsibilities over academic achievement.^{6,13} Significant disparities have already been observed in academic productivity by sex and child age during the pandemic. Now during a resurgence in COVID-19 infections, and uncertainty of reliable daycare and schooling, mothers are making difficult choices to sustain work and home life. The problem is even heavier for women who navigate intersectionality challenges (ie, race, sexual orientation). Institutions must urgently and proactively assess and respond to the pandemic's effects on worsening inequities facing women faculty, and offer reliable and rational solutions for retention and promotion.

INNOVATIVE AND SUSTAINABLE SYSTEMS-LEVEL STRATEGIES TO ADDRESS EQUITY AND OVERCOME BARRIERS TO SEX EQUITY IN ACADEMIC PROMOTION

Organizational change at the highest level should seek to overcome barriers to sex equity in academic promotion as opposed to “individual level” change. Simply put, the burden of changing the current state of inequities should be lifted from women; rather a system recreated that works for everyone (ie, change the system, not the women).

Extension of the tenure clock (*with or without FMLA*) has been widely proposed as a solution to mitigate COVID-19-related reductions in academic productivity. There are a multitude of shortcomings of this approach. Importantly, extension delays the time to promotion for an individual which carries long-term financial implications and risks widening the existing sex pay gap. Moreover, this

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extension delays the “rewards” of such promotion, limiting advanced leadership opportunities as 1 example. Data has paradoxically identified that the use of tenure-clock extensions for parental leave is wrought with sex inequity, citing that men who use this extension achieved tenure at higher rates than women using tenure extension.¹⁴ At the risk of penalizing women by denying them tenure through this extension, COVID-19-related extensions may compound the progress toward sex equity in professoriate and leadership to date.²

Strategies to Mitigate Inequitable Caregiver Responsibilities

Expand caregiver support meaningfully. This could include childcare and eldercare supplements, back-up childcare options, and University-arranged teaching and/or school pods for children. This is essential as faculty with young children are often paid less and lump sum supplements may be beneficial.¹⁵ Traditional support services for these critical caregiver needs are often more restricted during the pandemic. Therefore, identifying innovative strategies to support surgeons in this way, such as modifications to clinical schedules, could allow for greater equity in the workplace.

Strategies That Reduce Cognitive Load

Disseminate expectations and incentivize a reduction in non-essential events and activities. As an example, pause regular/biannual reviews and consider extending contracts (ie, without review). Reduce administrative tasks by expanding team leadership; a shared leadership model diffuses some effort while expanding leadership opportunities for others. Empower faculty to reflect on their multitude of tasks to choose which activities could be paused or relieved.

Create safe and productive workspaces for faculty on and off campus. Assist with the replication of office resources that exist on-site. Establish writing pods for faculty that facilitate assistance with manuscript and grant writing. Importantly, the strength of peer collaboration, encouragement, and guidance has been reported as a valuable facilitator for personal and professional satisfaction; moreover, peer advocacy and sponsorships are cited as important factors to facilitate advancement.¹

Many cost-cutting measures, reactive to fiscal constraints incurred by academic institutions as a direct result of the COVID-19 pandemic, carry long-term implications on career advancement. As examples, resist limiting internal grant/funding mechanisms, society dues, and resources for scholarly endeavors.¹⁶ Furthermore, examine how these decisions may have been proposed or distributed across faculty and consider redistribution. As 1 example, gift funds are often less susceptible to conventional fiscal cuts and may favor more senior or male faculty, whereas discretionary funds are more likely to be cut and be distributed to junior or women faculty.

Strategies to Value Uncompensated, Impactful Work

During the early months of the COVID-19 pandemic, elective surgery and most in-person research efforts were paused with the goal of maintaining social distancing, preserving personal protective equipment, and directing workforce efforts toward patients with coronavirus. Many surgeons stepped into new and expanded roles encompassing administrative and organizational work, which is not classically recognized as “impactful” for promotion but was critical during the pandemic (ie, rescheduling of patients, call schedule changes, planning for a field hospital in the case of hospital overflow, and creating a culture shift for team members supporting mental health and wellness). It is critical that this “COVID-19 contribution” work is recognized and quantified for the purposes of promotion,

especially as it highlights innovations in operations, clinical care, research, and teaching.¹⁶

Importantly, effort across missions of clinical care, education, research, and service should be captured collectively and valued in a standardized fashion. This standardization will help to apply metrics for goal setting, considered for both promotion and salary advances, and subject to tracking.¹⁶ Institutions are encouraged to implement a system that quantifies the COVID-19 impact on academic missions (specifically clinical, research, and education). These “COVID-adjustments” (ie, what would clinical productivity have been in the absence of pandemic-related restrictions?) should be considered and accounted for when assessing end-of-year productivity and compensation.

Policies that support flexible teaching and clinical duties for the academic year will facilitate personal health and permit child/elder care. For example, remote teaching with expanded virtual options, “co-teaching” (ie, shared course leadership), and capped service/course enrollments.

Providing promotions committees with additional background and education on sex inequities possibly intensified by COVID-19 would serve as a meaningful underpinning to their work. Alternate metrics should be offered and considered to expand the breadth of criteria for promotion. For example, there are bodies of work that are undervalued as classic “scientific contribution” for promotion (ie, culture change and diversity/equity/inclusion work). Providing promotions committees with a lens to this work and the tools with which to evaluate would serve to open up the academic pipeline.

Institutional and departmental leaders are encouraged to capitalize on affiliations and support from national organizations and societies that offer professional development and sponsorship programs, extramural funding, and leadership opportunities. The role for societal support and innovation to ensure professional and leadership development accessibility to faculty is even more important now. National academic surgical leaders amongst the American College for Surgeons, Association for Academic Surgery, Society of University Surgeons, and others have a role to play in guiding institutional responses and helping to establish and disseminate best practices during this time. Moreover, the cancellation of in-person conferences limits networking, mentorship, and professional recognition, which could be particularly problematic for those already marginalized at academic meetings. Ensuring diversity in planning committees, panels, and thoughtful facilitations to amplify participants’ voices will be especially critical as virtual programming continues.²

CONCLUSION

Barriers and facilitators to the advancement for women in academic surgery have previously been well described.¹ Organizational culture and institutional policies affect opportunities for advancement alongside relational interactions with leadership, mentors, colleagues, and staff. Progressive inequities challenge women in academic surgery, as aforementioned barriers are worsened during the COVID-19 pandemic. We propose a series of strategies to intentionally counteract this risk. Importantly, institutions must broadly prioritize these strategies and devote the necessary resources despite economic recovery. This is “mission critical” if women surgeons are to survive, let alone thrive in the workforce during this time and in years to come. Further, we propose that implementation of these processes and structures will support sustainable pathways to career success and satisfaction for women in academic surgery in the postpandemic era.

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