Journal of Healthcare Leadership Dovepress

Open Access Full Text Article ORIGINAL RESEARCH

Becoming Leaders – A Qualitative Research Study on the Priorities and Concerns of Early Career Women Faculty in Academic Medicine

Olivia Liu[1], Suzanne M Grieb[2], Jordan N Halsey[3], Rachel B Levine[4,5], Maria Oliva-Hemker[2,5], Jennifer K Lee[5,6]

[1]Johns Hopkins University School of Medicine (JHUSOM), Baltimore, MD, USA; [2]Department of Pediatrics, JHUSOM, Baltimore, MD, USA; [3]Department of Plastic and Reconstructive Surgery, JHUSOM, Baltimore, MD, USA; [4]Department of Medicine, JHUSOM, Baltimore, MD, USA; [5]Office of Faculty, JHUSOM, Baltimore, MD, USA; [6]Department of Anesthesiology and Critical Care Medicine, JHUSOM, Baltimore, MD, USA

Correspondence: Jennifer K Lee, Johns Hopkins University School of Medicine, Department of Anesthesiology and Critical Care Medicine, 1800 Orleans Street, Suite 6321, Baltimore, MD, 21287, USA, Tel +1-410-955-6412, Email Jennifer.lee@jhmi.edu

Background: Gender inequity persists in high-level leadership within academic medicine. Understanding the perspectives of early career women faculty could clarify how to recruit and support women who pursue high-level leadership. This study explored the specific priorities and concerns that may influence the recruitment of women leaders in the future.

Methods: Twenty-five assistant professors (mean: 1.8 years at rank) completed the Early Career Women's Leadership Program and participated in semi-structured, in-depth interviews in 2023. Data were analyzed using an iterative, thematic constant comparison process informed by constructivist grounded theory.

Results: The authors identified four themes. In theme one, participants described the *importance of being seen and valued as a whole person*, with consideration of their personal and professional lives. They sought mentorship and leadership positions that supported their work-life integration. In theme two, *women balanced an interplay between the individual and the collective* when considering themselves as future leaders. From the individual perspective, participants prioritized personal values like humility and compassion when discussing preferred leadership styles. From the collective perspective, they prioritized inclusivity and teamwork. Theme three showed *discomfort with the unknown* with a desire to fully understand a leadership position and its impact on personal and professional life. Participants wondered about having the authority and resources to realistically make meaningful change and whether they could adequately prepare to lead. The fourth theme was *representation mattered*. Participants valued having women leaders who have experienced similar challenges as themselves. These leaders inspired participants to believe that they could also achieve and succeed in high-level leadership.

Conclusion: Early career women balanced numerous factors when considering whether to pursue high-level leadership in academic medicine. Understanding women's priorities and concerns can enable institutions to prepare women faculty to lead and ultimately recruit and retain them in high-level leadership.

Keywords: leadership, women, gender, equity

Introduction

Having women in leadership strengthens innovation and support for the workforce. Women often excel in emotional intelligence, communication, and self-awareness.[1,2] These skills are essential for running teams that range from small groups to large organizations. Despite the demonstrated benefits of gender equity in leadership for organizations, inequity persists in the upper echelons of academic medicine. Women more often hold local leadership positions, such as clinical or education program directors, whereas men more often hold "high-level leadership" positions as department directors or in the dean's office or C-suite.[3–6] Although women comprise nearly 50% of full-time medical school faculty in the United States, only 27% of medical school deans and 24% of department directors are women.[4] Similar disparities exist

Received: 2 October 2024
Accepted: 26 November 2024
Published: 2 December 2024

in other American fields. Law firms,[7] government,[8] and Fortune 500 companies[9,10] also have disproportionately low numbers of women in high-level leadership positions, including equity partner, members of congress or state legislature, and chief executive officer. This raises the question: how can more women achieve high-level leadership and close this gender gap?

The answer may partly lie in recruiting today's early career women, who comprise the future candidate pool, into tomorrow's high-level leadership. But research about women's perspectives on leadership in medicine often focuses on those who are already leading,[2,11–17] including the impact of low confidence and home responsibilities.[2,11,18,19] Additional perspectives remain unexplored, especially the experiences of early career women who have not yet entered into leadership. Most studies about early career faculty and leadership focus on evaluating programs[20–23] or surveys[24] without in-depth explorations on how early career women view joining high-level leadership. Filling this knowledge gap could help clarify factors that encourage or dissuade early career women from pursuing high-level leadership to help mentors, leadership development programs, and institutions support women in attaining future appointments. Importantly, leadership positions must appeal to the candidates who institutional search committees want to attract. The tension between personal and professional priorities experienced by many women is exacerbated by gendered expectations in medicine, including masculine leadership styles.[25]

In this study, early career women graduates of a leadership program at an academic medical center were interviewed with the objective of exploring factors that influence women's intentions to advance as leaders. Because these faculty enrolled in the program to advance their leadership skills, they represent a potential future candidate pool for leadership recruitment. This study sought to address the question: what are the priorities and concerns early career women have about becoming high-level leaders? The results can inform institutional efforts to recruit and retain women leaders.

Methods

Participants and Setting

The Early Career Women's Leadership Program (ECWLP), offered by the Office of Faculty in the Johns Hopkins University School of Medicine (JHUSOM) Dean's Office, supports the professional development of women who have been assistant professors for less than 5 years. The JHUSOM has 3200 full-time faculty (47% women). Faculty could self-nominate or be nominated into the ECWLP. The 2023 cohort of 51 women met twice per month for 11 seminars over 5.5 months. Curricular content domains included self-awareness, resilience, navigating academic medicine, communication, negotiation, prioritization, aligning core values with leadership identity and purpose, mentorship, well-being, and self-promotion plus a panel discussion with high-level JHUSOM women leaders. Members of the JHUSOM Dean's Office or C-suite and professors who were content experts facilitated the seminars.[26]

Data Collection

In 2023, the investigators conducted in-depth interviews with a subset of ECWLP graduates. In-depth interviews were selected as the data collection strategy to gain detailed, personal insights on women faculty's experiences, thoughts, and feelings. Because some of these elements may be highly personal and sensitive, early career women faculty might not be comfortable sharing such information with colleagues in a focus group discussion. Additionally, in-depth interviews provided participants greater control over which topics to prioritize when sharing their experiences.[27] Since women's perceptions and experiences related to leadership may differ based on demographic and professional characteristics, participants were purposively recruited to ensure representation across degrees (MD, PhD, or MD/PhD), race and ethnicity, and career category (clinical research, basic, or translational science, clinical programs, or education). Potential participants were contacted by e-mail, informed of the study, and invited to participate. A sample size of 25 participants was determined based on the literature regarding sample sizes and thematic saturation.[28] Invitations were sent to 31 ECWLP graduates; 1 person declined to be interviewed and 5 did not respond. A woman early career faculty member who participated in the ECWLP (JH) or a woman medical student (OL) conducted the interviews.

The interviews followed a semi-structured format. Participants were asked about a range of topics, including work-life integration (WLI); support from family, friends, colleagues, mentors, and leaders; leadership values;

influence from women leaders; experience with pursuing leadership or having a leadership role; and considerations about applying for future leadership positions. The interview guide was developed using three sources: a conceptual model relating the tension between women's personal and professional aspirations and gendered norms of behavior and roles;[25] the experiences of senior women leaders;[11] and the investigators' experience in leadership. Three investigators (JH, OL, JKL) tested the guide and edited it for brevity. Appendix 1 shows the final interview guide.

Interviews lasted up to 50 min and occurred over Zoom (Denver, Colorado). The interviewer recorded the audio with participant permission. Participants did not receive compensation for participating. The participants' years at rank, self-reported racial and ethnic demographic data, and information on doctoral degrees were obtained from the JHUSOM Office of Faculty Information. Racially or ethnically underrepresented groups in medicine (URiM) were defined as Hispanic; American Indian or Alaska Native; Black or African American; or Native Hawaiian or other Pacific Islander.[29] The JHUSOM Institutional Review Board approved the study, and participants provided oral informed consent (protocol 00340091).

Analysis

Audio recordings were transcribed verbatim, and transcripts were cleaned of identifying information, including names and departments. The authors analyzed the transcripts using an iterative, thematic constant comparison process informed by constructivist grounded theory.[30,31] Four research team members (OL, JH, MOH, and JKL) developed an initial coding framework by independently reading two transcripts each (four transcripts, each read by two investigators) to create a preliminary coding framework via open coding. The initial codebook was developed by merging the preliminary coding frameworks, removing duplicate items, and collapsing codes from the open coding list based on similarities and differences. Multiple iterations of the codebook were created through coding additional transcripts and subsequent reflection and discussion by three coders (OL, SMG, and JKL). Using the constant comparison method, codes were compared within a single interview and between interviews. This iterative process facilitated the refinement of existing codes, identified emergent codes, and illuminated potential relationships between codes.[30,32,33] The three coders independently applied the final codebook systematically to each transcript using ATLAS.ti software (Berlin, Germany) such that each transcript was double coded; JKL resolved discrepancies. When the coding was complete, the research team reviewed, discussed, and aggregated the coded text into thematic categories based on how the codes related to one another. The final thematic framework provided a higher level of contextual framing of the codes and coded text. Qualitative data are presented using participants' direct quotes and their URiM or non-URiM status, which may influence their perspectives.

OL is a medical student, JH and SMG are assistant professors, and MOH, RBL, and JKL are professors and leaders in the JHUSOM Office of Faculty within the Dean's Office. All investigators self-identify as women. Through regular meetings, the investigators employed a team approach to the data analysis whereby different analysts with different perspectives provided feedback on emerging interpretations and checked emerging categories against the raw data, allowing for discussion and reflexivity. Additionally, the investigators kept discussion notes and records of decision-making (ie, codebook versions), thereby creating an "audit trail" of the analytic process.[34,35]

Results

Twenty-five ECWLP graduates were interviewed. Participants self-identified as women and had been assistant professors for a mean of 1.8 years (standard deviation: 1.4; Table 1). The investigators identified four main themes: (1) the importance of being seen and valued as a whole person, (2) balancing an interplay between the individual and the collective, (3) discomfort with the unknown: a desire to fully understand a leadership position and its future impact on personal and professional life, and (4) representation matters: the importance of having women leaders who have experienced similar challenges as the participants. No differences were observed between the career paths. Supporting quotes are provided below and in Box 1.

Table 1 Description of 25 Women from the Johns Hopkins University School of Medicine Early Career Women's Leadership Program Who Participated in Interviews

Characteristic	
Career path[a]	**n (%)**
Clinical research	8 (32)
Clinical programs	8 (32)
Basic or translational science	6 (24)
Education	3 (12)
Highest doctoral degree	
MD	13 (52)
PhD	5 (20)
MD, PhD	4 (16)
DO	1 (4)
MBBS, PhD	1 (4)
Race/ethnicity[b]	
White or Asian	20 (80)
Underrepresented in medicine	4 (16)
Prefer to not answer	1 (4)
Department	
Internal Medicine	5 (20)
Neurology	3 (12)
Pathology	3 (12)
Pediatrics	3 (12)
Oncology	2 (8)
Psychiatry	2 (8)
Anesthesia and Critical Care Medicine	1 (4)
Molecular and Comparative Pathobiology	1 (4)
Pharmacology and Molecular Sciences	1 (4)
Plastic Surgery	1 (4)
Radiation Oncology and Molecular Radiation Sciences	1 (4)
Radiology	1 (4)
Urology	1 (4)

Notes: [a]Career path was determined by responses to ECWLP application questions about examples of work the faculty were proud of and future career goals. [b]Data are reported in the aggregate for anonymity. Underrepresented in medicine: Hispanic, Latinx, or Spanish origin; American Indian or Alaska Native; Black or African American; or Native Hawaiian or other Pacific Islander.

The Importance of Being Seen and Valued as a Whole Person

The desire to be recognized and appreciated as a whole person—rather than separating professional from personal life—manifested in receiving mentorship. Participants described how mentors with the greatest impact showed genuine care about their personal lives, WLI, and happiness while helping them achieve their professional goals. Participants more often attributed the provision of personal and professional support to women mentors than men mentors though participants described many valued characteristics in men mentors. Relationships with men mentors typically centered around work-related goals, such as grant writing, whereas women mentors more often helped participants integrate professional and personal goals. One participant described how she discusses the intersection of career and parenting with her woman mentor:

Box 1 Additional Representative Quotes by Theme

The importance of being seen and valued as a whole person

"Having [a woman mentor] be honest about her own personal struggles of being a mom, having two kids, being a wife… She was very open about her personal life and it made me feel as if I am not alone. I felt that she saw me for who I was and she understood. She took time to understand what my goals would be. And that has molded me throughout these past four years. That's been helpful". (URiM)

Balancing an interplay between the individual and the collective

Individual perspective:

"What I value is integrity. Meaning that whatever is being done, whatever the end is, should not have to compromise who you are [and] whatever it is you believe". (URiM)

"[A future leadership role] would have to align with my general values of prioritizing patients… and prioritizing the people [I] work with. I see clinical or administrative leadership roles where the interest of the organization that they have to represent is very different from [the priorities of] the doctors that are practicing or even the patients. You have budget and clinical revenue [as organizational priorities]". (non-URiM)

Collective perspective:

"If I am leading a team, I still want everybody to have a team dynamic and be making progress and relying on one another to some extent. I find that's more interesting and brings more novelty to the situation". (non-URiM)

"These are my goals. If this is feasible, I'd like to do [the leadership role]. And if it's not, then that's okay. Other people can do it. I do not have a problem with that. They may have a better fit for the vision [of] leadership, and that's perfectly reasonable". (non-URiM)

Discomfort with the unknown: a desire to fully understand a leadership position and its future impact on personal and professional life

"One of the things I fear with leadership positions is losing that [work-life] balance… Not having the mental time [and] resources to do everything I want to do. And not being able to say 'no' to something or drop something else in lieu of [the] leadership position". (non-URiM)

"[I would need to know that I could] reduce some of my clinical work… so I would be able to focus more on [the] leadership position". (non-URiM)

Representation matters: the importance of having women leaders who have experienced similar challenges as the participants

"Some of [these women with school-age children] are the highest leaders within the institution… They have shown that you can. Anything's attainable if you want it". (URiM)

"Just showing that there's someone who looks like me who's in these [leadership] roles… Because I think [diversity in leadership] is something that we lack. They belong… this path is possible". (non-URiM)

Abbreviation: URiM, underrepresented in medicine.

> I talk to [my woman mentor] about... what is it to be a mother and also do this type of career? What did you do and what did you learn?… It's a different type of relationship [than with my man mentor]… It's nice to have these real conversations [with my woman mentor] about how do you balance getting the laundry done and doing what you do [professionally]. (non-URiM)

Influential mentors took time to understand the participants' professional and family goals while sharing their personal experiences.

Participants wanted only part of their identity to center around work. Many wanted to emulate women leaders who openly discuss family life:

> [A woman leader I respect] talks about her family, the challenges of being a mother, and the challenges of running her household. It's like you're like a real person with a real life, and this [leadership position] is just one part of your life and it's a really awesome part of your life. But this isn't your whole personality… There are some assumptions that women are either a family person or a job person. The fact that she can [say], "No, that's not the case. This is who I am. I'm all of these things". (non-URiM)

Participants sought recognition for their talents and goals. Some expressed frustration that the personal attributes they take pride in and believe are essential in leadership, such as generosity, hinder career advancement:

> [To be a good leader], I think the idea is to be fair and measured. Generous would be good as well. But then opportunities in academic medicine are few and far between. So it's easy to become greedy for those opportunities [and] to insert yourself into

situations where maybe you aren't the best candidate but you can probably do it. But you could have passed that invitation along to somebody else, but it felt like you really needed it. I don't want to be like that. (non-URiM)

Balancing an Interplay Between the Individual and the Collective

Participants described a spectrum of considerations when thinking about advancing as leaders.

The Individual Perspective

Nearly all participants desired better WLI. They discussed struggling to find time for sleep, healthy eating, exercise, and other self-care activities in their current jobs. Many seemed unwilling to sacrifice more of their personal, family, and home lives for the sake of leading. This included the belief that some high-level leadership positions require being available nearly 24 hours per day, 7 days a week, which for some was not acceptable:

I want to have the power within a week, [if] I want to do something Saturday afternoon or I know I'm going to need to leave a little bit early… I can come in early to make up for it… Just having some wiggle room… Work is important, the things that I do are important, and people rely on me and it's meaningful. But also I don't have to be available 24/7 in order for [work] to keep moving. (non-URiM)

Participants reported being wary of situations that could require leadership styles that contradict their personal values of humility, compassion, and kindness. They expressed feeling discouraged from seeking leadership roles that would require behaviors that oppose their personal values, such as making unilateral decisions.

Some of the things that I value the most are clear, honest, and direct communication… [As a future leader, I want to] have a vision that is informed by the people that I'm working with. Not just me dictating. (URiM)

Most participants preferred to lead in environments with a desirable work culture. Some worried that institutional financial interests conflicted with their personal goals for patient care or that they might feel pressured to compromise their values should they become leaders.

The Collective Perspective

Many participants preferred to work on teams rather than alone. They believed that inclusive teams achieve better results by incorporating different perspectives, experiences, and skillsets that contribute to a shared goal:

So when I think about collaboration, it's people coming together each with their unique expertise. Create something new. (non-URiM)

They sought to lead in a manner that ensures every team member's opinion is considered, all members feel supported, and collaborations benefit everyone. A participant described her goal for becoming a department chair:

One of the things I get really excited about is enabling other people to do great work… I think that one of the roles of a [department] directorship position is to look at the portfolio of the whole department and see what needs more support… create partnerships and collaborations. Elevate everybody. Support everybody so they can do great work and make an impact on the field. (non-URiM)

The participants' emphasis on teamwork connected to their desire to be valued as a whole person while also recognizing others as whole people. This included allowing people to be themselves; recognizing diverse perspectives, experiences, and skills; and acknowledging people's needs and priorities. The importance of fairness as a feature of collaboration and teamwork was reflected in wanting the most qualified person to lead, knowing that a single person cannot always be the best leader for all situations, and recognizing the team's contribution to the leader's success. Motivations to lead included recognizing the work of other people and helping trainees and colleagues advance.

Discomfort with the Unknown: A Desire to Fully Understand a Leadership Position and Its Future Impact on Personal and Professional Life

Participants described uncertainty, insecurity, and even fear about what might occur should they advance as leaders. Many sought clarity about the types of changes they could realistically make in the workplace and whether other leaders and colleagues would respect their decisions. The participants wanted to know whether their goals would motivate and align with those of their future leadership team and the degree of support they would receive from their own leaders. They also wished to know who would be on their team and whether the team's dynamics would support them as new leaders. Moreover, participants wanted to know if they would have the authority, influence, and resources to make decisions and changes for populations they hoped to impact:

> [I want to] actually make progress on [an] agreed upon problem or situation rather than just maintaining a system… figure out how to do something better or in new ways. (non-URiM)

A participant noted the importance of her work being recognized and compensated, understanding that this is often not guaranteed:

> I want the time that I'm putting in to be seen and valued by others. I also appreciate being supplemented with effort and money. (non-URiM)

Many wanted clarity about their future WLI and how time with family would be impacted should they be appointed to high-level leadership. This included concerns about needing to work late at night and on weekends, resulting in loss of family time. They wanted to know whether how they choose to spend their time would be respected by colleagues and other leaders. They expressed caring deeply about protecting time with their families in addition to achieving their professional aspirations:

> I think a lot of leadership roles come with a lot of work. And given that my plate feels full and I'm still not in a leadership position right now, I would want to make sure that that time [to do the leadership role] comes from somewhere that's not my nights and weekends. (non-URiM)

Accordingly, the women desired full support from their family when considering leadership positions.

Some participants were uncomfortable with not knowing exactly what skills they would need in a new position. This led to the desire to be overly prepared for any situation or challenge that might arise before applying for a leadership position.

> Men will go forward before women and say, yes, I'm ready [to apply for a leadership position]. And women will be qualified with 14 certificates under their arm and still say, well, I think I just need one more. (non-URiM)

Representation Matters: The Importance of Having Women Leaders Who Have Experienced Similar Challenges as the Participants

Participants valued seeing women leaders succeed using attributes that are traditionally considered communal, including compassion and empathy. One described seeing a woman leader navigate gendered expectations:

> She's a woman and she fulfills this role of being kind and warm, but at the same time she can be really clear about what's expected and when something is not correct. It's a really impressive line that she walks. Because sometimes women in leadership positions... if you tell it like it is too much, there can be some backlash. But somehow she has found a way to just be very upfront but also still a warm person that people want to work with and be around. (non-URiM)

They were also inspired by high-level women leaders who have family care responsibilities, as many felt they were viewed differently as working mothers compared to working fathers. One described a dichotomy in how mothers and fathers in leadership are often viewed:

> It's pretty common for people to think that [a woman is] either a family person or a job person… Whereas with a man, of course they have a family and of course they have a job – that's just normal. (non-URiM)

Having URiM women in high-level leadership serve as mentors and role models positively and significantly influenced the confidence of URiM participants. Seeing other women who are URiM succeed in high-level leadership showed that this is possible for them, too:

> [A black woman leader] has been a really amazing mentor for me… I've only met a few other black women faculty. To see someone who's like me, who's doing so well so quickly, it just helps me realize that it's possible. It gives me the courage to be unconventional. If I'm aspiring to get promoted in this short timeframe… there's no real rule that I can't, so let's aspire for that. And then [mentor] moved into a [high-level leadership position]. I never even knew that was a possibility. If I wanted to explore something, now I know I have the possibility of doing that. (URiM)

Discussion

Gender inequity persists within high-level leadership in academic medicine.[4] The perspectives of early career women, many of whom could become our future leaders, must be understood to recruit and retain women in the upper echelons of leadership. This study identified four themes in interviews of ECWLP graduates that can inform institutional practices and improve gender equity. First, early career women want to be seen and valued as a whole person with integration of their personal and professional identities. Second, they balance an interplay between the individual and the collective when considering a future in leadership. The individual perspective included desiring better WLI and wanting to lead in a manner that aligns with their personal values. The collective perspective centered around teamwork, inclusivity, and fairness. Third, participants felt discomfort over preparing to lead, whether they can realistically improve systemic problems, and how a leadership role would impact their lives. Finally, participants stressed the importance of meeting women in leadership, especially those who have experienced similar challenges as the participants, to serve as role models.

These findings align with a model describing the tension women in medicine experience from competing professional and personal priorities, masculine leadership norms, and stigma around WLI by Winkel et al.[25] In the current study, participants described factors that help alleviate some of these conflicts. Based on the study's findings and existing literature, the authors provide recommendations that could benefit faculty of all genders (Box 2).

Women are more likely than men to suffer career consequences after discussing their families at work.[36] The study results show that early career women disagree with the expectation that people only show their professional sides at work. They instead want to integrate the professional and personal aspects of their lives. The authors recommend that institutional policies for childbirth and parental leave be combined with methods to help faculty access high-quality childcare to support work productivity and satisfaction. Additionally, workplace cultures should encourage people to share personal and family information to foster a sense of connection and belonging. This could enhance well-being for everyone, including men with caregiving responsibilities,[37] amidst the productivity-driven culture of medicine.[38] When possible, flexible working hours, which were mentioned as important by the study participants, can support faculty in optimizing when and how to maximize their work productivity while still meeting their family obligations. Such initiatives could help retain talented physicians and scientists of all genders in academic medicine and make leadership more desirable and achievable.

Stigmas against faculty who are undergoing fertility treatment, are pregnant or lactating, or have childcare responsibilities must be stopped.[39] Efforts are underway to protect time for prenatal visits for medical trainees;[40] similar policies could be developed to support faculty. Using moonlighting physicians or advanced care practitioners or providing additional compensation to colleagues who cover some clinical duties of pregnant faculty, such as overnight shifts during the third trimester, could mitigate potential feelings of unfairness by colleagues.[39]

Participants described how influential mentors genuinely care about their WLI alongside professional productivity. This adds a nuance to common views of mentorship, which often focus on the mentee's professional accomplishments and scholarly work.[41] Early career women want mentors and leaders to consider their whole life and identity. Few participants mentioned plans to pursue higher leadership once their children reach adulthood. For women who do not want to pursue leadership while they have many caregiving responsibilities, mentors could help them adjust their

Box 2 Recommendations to Support Faculty of All Genders

Foster workplace cultures that support faculty in their personal, family, and professional lives

- Combine institutional policies for childbirth recovery and parental leave with systems that assist in obtaining high-quality childcare
- Support faculty who are receiving fertility treatments or are pregnant by providing protected time for their own medical visits. Moonlighters, advanced practice providers, or providing extra compensation to colleagues can help reduce potential feelings of unfairness by other faculty.
- Support a workplace culture that encourages faculty to share personal and family information to enhance a sense of connection and belonging
- Within mentoring relationships, incorporate open discussions and support for mentees' work-life integration in addition to professional productivity
- For mentees who do not want to pursue high-level leadership while they have many caregiving responsibilities, assist them in adjusting milestone goals to have accelerated professional advancement later in life. This includes preparing for and applying to high-level leadership positions when they have fewer family responsibilities.

Increase gender diversity in the leadership search and hiring process

- Include terms that are traditionally considered feminine, such as empathy, in the job description's desired leadership traits. Avoid predominantly using traditional masculine terminology, like decisive, confident, and independent, in the job descriptions.
- Encourage qualified faculty to apply for leadership positions even if they do not believe that they are fully prepared. Remind faculty that many skills can be learned as part of the job once they are appointed.
- Include information in the job description about workplace culture, typical working hours, and available resources, training, mentorship, and coaching. Favorably view candidates who ask about these topics; they are realistically preparing to succeed in the leadership role.

Prepare faculty to lead in challenging situations

- Teach resilience-building and stress management skills through mentorship, coaching, and leadership development programs. Encourage high-level leaders to share how they manage stressful situations and failures in conversations with faculty who are considering advancing their own leadership careers.
- Encourage self-promotion and self-confidence
- Practice techniques to lead change in difficult environments, including when team members resist change or when resources are limited
- Teach team leadership strategies that do not dilute the leader's role, responsibilities, or recognition
- Provide coaching during leadership training, onboarding, and as the leader's career progresses

milestone goals for faster professional advancement later in life. This requires that age discrimination[42] not be tolerated in leadership searches. Moreover, faculty must proactively seek multiple mentors to meet their varying needs.

An interesting interplay emerged between the priorities of the individual and the collective. Gendered characteristics and language, which have long affected career advancement,[43,44] manifested in the individual perspective. Participants emphasized specific attributes, including empathy, compassion, and humility. While these values are essential in leadership,[45] they fall into the category of traditional feminine descriptors.[43,44] By contrast, desired leadership attributes are often described using traditional masculine terms, such as independence, confidence, ambition, and decisiveness.[43,44] Job descriptions with mostly masculine words dampen women's interest in applying.[44] Accordingly, participants were opposed to taking leadership roles that could require behaviors that contradict their personal values. Women may view leadership opportunities more favorably when the job description's language reflects their values. The search process for leadership positions should be guided by an understanding of how gendered language influences the candidate pool and how candidates are viewed.[43,44]

The individual perspective also showed participants' desire to lead in idealized organizations that would, for example, balance employee WLI and patient care alongside revenue. There was low interest in spearheading change within difficult environments, such as dealing with growing financial challenges in medicine.[46] However, high-level leaders must commit to difficult endeavors in suboptimal situations. This includes leading culture and system changes that people may initially resist but that result in long-term benefit.[47] The authors suggest that leadership programs emphasize strategies for building resilience and leading change in challenging environments to prepare and empower physicians and scientists as future leaders. For instance, incorporating coaching into leadership programs may help participants strengthen their resilience[48] and commit to change-oriented behaviors.[49]

The collective perspective on leadership emphasized teamwork. While being team-oriented may enhance productivity, faculty should also be educated on the pitfalls of being excessively team-oriented. For example, an overly team-

oriented leader might distribute too much responsibility to others and dilute personal responsibility. Women who are uncomfortable with self-promotion[50] may give too much credit to their team without obtaining personal recognition. Thus, leadership programs should teach effective self-promotion alongside team leadership skills.[51]

Few women mentioned desiring a prestigious title with higher salary, as this was not key to their core values. Only some noted needing effort and salary for their work; most did not mention this at all. The infrequent discussion of salary could be related to several factors. Low confidence deters many women from pursuing leadership.[11] Accordingly, some women may feel the need to achieve significant success before being comfortable stating that they deserve a leadership appointment with commensurately high salary. Gender inequity in salary,[52] consequences for women who negotiate,[53] and lower salary for women in the same high-level leadership positions as men[54] may also contribute to women's low salary expectations. We encourage leadership programs, department chairs, and division chiefs to normalize ambition, negotiation, and allyship for gender and pay equity. Importantly, institutional transparency about compensation for leadership roles would support faculty of all genders in negotiating for salary.

Many participants were uncomfortable with the unknown aspects of leadership. This included questioning whether they would have the authority and resources to make meaningful change and the impact becoming a leader could have on their WLI. Their desire to have all the necessary skills before applying for a position, rather than learning skills "on the job", reflected how women tend to wait until they are overly prepared to apply. In contrast, men often apply with fewer qualifications.[55]

To demystify how various leadership roles work, the authors propose that job descriptions and interviewers clearly communicate information about workplace culture, typical working hours, and available resources, training, mentorship, and coaching. Rather than negatively judging candidates who seek this information, these candidates should be viewed as preparing to succeed in the new role. Additionally, creating opportunities for women to meet high-level leaders during leadership programs is essential. Hearing leaders share personal stories of failed endeavors would foster an appreciation for perseverance and resilience. Leaders could describe how they accept that they can address some, but not all, problems, and how they continue to receive mentorship and coaching.

Finally, the study's findings show the importance of having women in high-level leadership, especially those who experienced similar challenges as the participants. These women inspire others with shared experiences. For instance, many women of color[56] or who have a different sexual orientation[57] or a disability[58] must navigate discrimination and historic institutional racism[59] successfully. Additionally, organizational skills from being a working parent often help prepare people for leadership. Research at other institutions similarly highlights the need for more women leaders as role models.[15]

This study had several limitations. Data were collected from women who participated in the ECWLP at a single academic medicine institution. Future research should include women at different institutions and from different career stages. All participants applied for and participated in the ECWLP. Their perspectives may differ from people who did not participate in the ECWLP or who do not work in the JHUSOM, and the program may have influenced their views. Participants were very early in their careers; more experience might influence their decision-making on leadership. Future longitudinal studies would enable an exploration of how factors that influence women's intent to pursue high-level leadership change over time. The sample size may not have allowed us to fully explore diverse perspectives and experiences, and the findings may not be generalizable to all women in academic medicine. As with all qualitative research, the research team's experiences may have influenced the interpretation of the results.

Conclusions

The current perceptions of early career women must be considered to recruit and retain women as future high-level leaders. The study identified details about how women wish to lead and clarified factors that encourage or dissuade them from leadership. This included the importance of women knowing that they are professionally and personally valued and being able to lead in inclusive work environments that respect people's personal values. Demystifying the realities of leadership early in the job application process by describing available resources, mentors, and coaches may improve the recruitment of women into high-level leadership. Moreover, women who are high-level leaders could serve as role

models to inform future leadership candidates about the aspects of their job that they find rewarding and challenging, how they address obstacles, and how they manage their WLI.

Abbreviations

ECWLP, Early Career Women's Leadership Program; JHUSOM, Johns Hopkins University School of Medicine; URiM, underrepresented in medicine; WLI, work-life integration.

Data Sharing Statement

Data will be made available upon request by contacting the corresponding author at Jennifer.lee@jhmi.edu.

Ethics Approval and Consent to Participate

All study procedures were approved by the JHUSOM Institutional Review Board, and informed consent to participate in the research was obtained, including consent to publish anonymized responses (Protocol 00340091).

Funding

There is no funding to report.

Disclosure

JKL consults for the United States Food and Drug Administration and Erickson Coaching International, and owns Asclepius Coaching and Consulting, LLC. MOH has funding from Takeda Pharmaceuticals, Pfizer, and PredictImmune and consults for Takeda Pharmaceuticals and Janssen Research and Development. RBL consults for the Association of American Medical Colleges. The authors report no other conflicts of interest in this work.

References

1. Amar S. Why everyone wins with more women in leadership. Available from: https://www.forbes.com/sites/forbesbusinesscouncil/2023/02/07/why-everyone-wins-with-more-women-in-leadership/?sh=17791bcb3cdd. Accessed February 2, 2024.
2. Elias E. Lessons learned from women in leadership positions. *Work*. 2018;59(2):175–181. doi:10.3233/wor-172675
3. 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*. 2015;24(10):837–842. doi:10.1089/jwh.2014.5054
4. Colleges AAoM. Faculty Roster: U.S. Medical Faculty. Available from: https://www.aamc.org/data-reports/faculty-institutions/report/faculty-roster-us-medical-school-faculty. Accessed February 7, 2024.
5. Chaudron LH, Harris TB, Chatterjee A, Lautenberger DM. Power reimagined: advancing women into emerging leadership positions. *Acad Med*. 2023;98(6):661–663. doi:10.1097/acm.0000000000005129
6. Gottlieb AS, Roy B, Herrin J, et al. Why are there so few women medical school deans? Debunking the myth that shorter tenures drive disparities. *Acad Med*. 2024;99(1):63–69. doi:10.1097/acm.0000000000005315
7. Weiss D For the first time, women make up majority of law firm associates, new NALP report says. Available from: www.americanbar.org/groups/journal/articles/2024/for-The-first-time-women-make-up-A-majority-of-law-firm-associates-nalp-report-says/. Accessed November 9, 2024.
8. Schaeffer K Pew Research Center: the data on women leaders. Available from: www.pewresearch.org/social-trends/fact-sheet/the-data-on-women-leaders/. Accessed November 9, 2024.
9. Pontefract D Forbes: key steps to breaking gender equity barriers in leadership. Available from: www.forbes.com/sites/danpontefract/2024/03/01/key-steps-to-breaking-gender-equity-barriers-in-leadership/. Accessed November 10, 2024.
10. Hinchliffe E Women CEOs run 10.4% of Fortune 500 companies. Available from: fortune.com/2023/06/05/fortune-500-companies-2023-women-10-percent/. Accessed November 9, 2024.
11. Guptill M, Reibling ET, Clem K. Deciding to lead: a qualitative study of women leaders in emergency medicine. *Int J Emerg Med*. 2018;11(1):47. doi:10.1186/s12245-018-0206-7
12. Soklaridis S, Kuper A, Whitehead CR, Ferguson G, Taylor VH, Zahn C. Gender bias in hospital leadership: a qualitative study on the experiences of women CEOs. *J Health Organ Manag*. 2017;31(2):253–268. doi:10.1108/jhom-12-2016-0243
13. Silver CH, Benitez A, Armstrong K, Tussey CM. Voices of leadership: wisdom from women leaders in neuropsychology. *Clin Neuropsychol*. 2018;32(2):252–262. doi:10.1080/13854046.2017.1417484
14. Basile ER, Byrd H, Powell-Williams M, Polania Gutierrez JJ, Riveros-Perez E. Gender gap: a qualitative study of women and leadership acquisition in anesthesiology. *Anesth Analg*. 2023;136(1):6–12. doi:10.1213/ane.0000000000006073
15. Chow CJ, Ferrel MN, Graham EM, Fix ML. Perspectives from students and faculty on how women achieve leadership roles in academic medicine: an exploratory qualitative study. *Cureus*. 2024;16(4):e57969. doi:10.7759/cureus.57969
16. Allen M, Lazor J, Nirmalanathan K, Nowacki A. Women at the top: a qualitative study of women in leadership positions in emergency medicine in Canada. *Cjem*. 2024;26(11):819–827. doi:10.1007/s43678-024-00751-y

17. Hobgood C, Draucker C. Gender differences in experiences of leadership emergence among emergency medicine department chairs. *JAMA Network Open*. 2022;5(3):e221860. doi:10.1001/jamanetworkopen.2022.1860
18. Haines AC, McKeown E. Exploring perceived barriers for advancement to leadership positions in healthcare: a thematic synthesis of women's experiences. *J Health Organ Manag*. 2023;37(3):360–378. doi:10.1108/jhom-02-2022-0053
19. Surawicz CM. Women in leadership: why so few and what to do about it. *J Am Coll Radiol*. 2016;13(12 Pt A):1433–1437. doi:10.1016/j.jacr.2016.08.026
20. Morrow MMB, Schafer MJ, Kantarci K, Mielke MM, Vachon CM, Winham SJ. Leadership development in early career scientists: themes and feedback from executive coaching and mindful leadership training. *J Womens Health*. 2023;32(8):877–882. doi:10.1089/jwh.2023.0024
21. Deutsch N, Yanofsky SD, Markowitz SD, et al. Evaluating the women's empowerment and leadership initiative: supporting mentorship, career satisfaction, and well-being among pediatric anesthesiologists. *Paediatr Anaesth*. 2023;33(1):6–16. doi:10.1111/pan.14596
22. Kelly EH, Miskimen T, Rivera F, Peterson LE, Hingle ST. Women's Wellness Through Equity and Leadership (WEL): a program evaluation. *Pediatrics*. 2021;148(Suppl 2). doi:10.1542/peds.2021-051440I
23. Schwartz JM, Markowitz SD, Yanofsky SD, et al. Empowering women as leaders in pediatric anesthesiology: methodology, lessons, and early outcomes of a national initiative. *Anesth Analg*. 2021;133(6):1497–1509. doi:10.1213/ane.0000000000005740
24. Harris CE, Clark SD, Chesak SS, et al. GRIT: women in medicine leadership conference participants' perceptions of gender discrimination, disparity, and mitigation. *Mayo Clin Proc Innov Qual Outcomes*. 2021;5(3):548–559. doi:10.1016/j.mayocpiqo.2021.02.007
25. Winkel AF, Telzak B, Shaw J, et al. The role of gender in careers in medicine: a systematic review and thematic synthesis of qualitative literature. *J Gen Intern Med*. 2021;36(8):2392–2399. doi:10.1007/s11606-021-06836-z
26. Lee JK, Tackett S, Skarupski KA, et al. Inspiring and preparing our future leaders: evaluating the impact of the early career women's leadership program. *J Healthc Leadersh*. 2024;16:287–302. doi:10.2147/jhl.s470538
27. Liamputtong P. *Qualitative Research Methods*. Oxford University Press; 2010.
28. Hennink MM, Kaiser BN, Marconi VC. Code saturation versus meaning saturation: how many interviews are enough? *Qual Health Res*. 2017;27(4):591–608. doi:10.1177/1049732316665344
29. Ogunyemi D, Okekpe CC, Barrientos DR, Bui T, Au MN, Lamba S. United States medical school academic faculty workforce diversity, institutional characteristics, and geographical distributions from 2014-2018. *Cureus*. 2022;14(2):e22292. doi:10.7759/cureus.22292
30. Boeije H. A purposeful approach to the constant comparative method in the analysis of qualitative interviews. *Qual Quant*. 2002;36(4):291–409. doi:10.1023/A:1020909529486
31. C K. *Constructing Grounded Theory*. Sage Publications; 2014.
32. Glaser B. The constant comparative method of qualitative analysis. *Soc Probl*. 1965;12(4):436–445. doi:10.2307/798843
33. Thorne S. Data analysis in qualitative research. *Evid Based Nurs*. 2000;3(3):68–70. doi:10.1136/ebn.3.3.68
34. Guba EG, Lincoln YS. *Fourth Generation Evaluation*. Sage; 1989.
35. Morse JM. Critical analysis of strategies for determining rigor in qualitative inquiry. *Qual Health Res*. 2015;25(9):1212–1222. doi:10.1177/1049732315588501
36. Global views on acceptable behaviour and equality in the work place. Available from: www.ipsos.com/sites/default/files/ct/news/documents/2020-03/international-women-day-2020-ipsos.pdf. Accessed April 17, 2024.
37. Accius J Breaking stereotypes: spotlight on male family caregivers. Available from: https://www.aarp.org/content/dam/aarp/ppi/2017-01/Breaking-Stereotypes-Spotlight-on-Male-Family-Caregivers.pdf. Accessed February 7, 2023.
38. Schwartz AW, Solomon SR. Finding and doing what matters most: five productivity strategies for physicians in academic medicine. *Med Teach*. 2023;45(2):123–127. doi:10.1080/0142159x.2022.2126762
39. Knell J, Kim ES, Rangel EL. The challenges of parenthood for female surgeons: the current landscape and future directions. *J Surg Res*. 2023;288:A1–a8. doi:10.1016/j.jss.2023.02.042
40. Bamdad MC, Hughes DT, Englesbe M. Safe and supported pregnancy: a call to action for surgery chairs and program directors. *Ann Surg*. 2022;275(1):e1–e2. doi:10.1097/sla.0000000000005181
41. Cochran A, Elder WB, Neumayer LA. Characteristics of effective mentorship for academic surgeons: a grounded theory model. *Ann Surg*. 2019;269(2):269–274. doi:10.1097/sla.0000000000002487
42. Daldrop C, Buengeler C, Homan AC. An intersectional lens on young leaders: bias toward young women and young men in leadership positions. *Front Psychol*. 2023;14:1204547. doi:10.3389/fpsyg.2023.1204547
43. Marchant A, Bhattacharya A, Carnes M. Can the language of tenure criteria influence women's academic advancement? *J Womens Health*. 2007;16(7):998–1003. doi:10.1089/jwh.2007.0348
44. Gaucher D, Friesen J, Kay AC. Evidence that gendered wording in job advertisements exists and sustains gender inequality. *J Pers Soc Psychol*. 2011;101(1):109–128. doi:10.1037/a0022530
45. Östergård K, Kuha S, Kanste O. Health-care leaders' and professionals' experiences and perceptions of compassionate leadership: a mixed-methods systematic review. *Leadersh Health Serv*. 2023;37(5):49–65. doi:10.1108/lhs-06-2023-0043
46. Konstam MA, Hill JA, Kovacs RJ, Harrington RA, Arrighi JA, Khera A. The academic medical system: reinvention to survive the revolution in health care. *J Am Coll Cardiol*. 2017;69(10):1305–1312. doi:10.1016/j.jacc.2016.12.024
47. Bhardwaj A. Organizational culture and effective leadership in Academic Medical Institutions. *J Healthc Leadersh*. 2022;14:25–30. doi:10.2147/jhl.s358414
48. Dyrbye LN, Gill PR, Satele DV, West CP. Professional coaching and surgeon well-being: a randomized controlled trial. *Ann Surg*. 2023;277(4):565–571. doi:10.1097/sla.0000000000005678
49. Halliwell PR, Mitchell RJ, Boyle B. Leadership effectiveness through coaching: authentic and change-oriented leadership. *PLoS One*. 2023;18(12):e0294953. doi:10.1371/journal.pone.0294953
50. Lindeman MIH, Durik AM, Dooley M. Women and Self-Promotion: a Test of Three Theories. *Psychol Rep*. 2019;122(1):219–230. doi:10.1177/0033294118755096
51. Koeslag-Kreunen M, Van den Bossche P, Hoven M, Van der Klink M, Gijselaers W. When leadership powers team learning: a meta-analysis. *Small Group Res*. 2018;49(4):475–513. doi:10.1177/1046496418764824

52. Catenaccio E, Rochlin JM, Simon HK. Addressing gender-based disparities in earning potential in academic medicine. *JAMA Network Open*. 2022;5(2):e220067. doi:10.1001/jamanetworkopen.2022.0067
53. Bowles HR, Babcock L, Lai L. Social incentives for gender differences in the propensity to initiate negotiations: sometimes it does hurt to ask. *Organizational Beha Human Decis Processes*. 2007;103(1):84–103. doi:10.1016/j.obhdp.2006.09.001
54. Gottlieb AS, Dandar VM, Lautenberger DM, Best C, Jagsi R. Equal pay for equal work in the dean suite: addressing occupational gender segregation and compensation inequities among medical school leadership. *Acad Med*. 2023;98(3):296–299. doi:10.1097/acm.0000000000005087
55. Mohr TS. Why women don't apply for jobs unless they're 100% qualified. *Harvard Business Review*. 2014:25:40–45.
56. Billups S, Thelamour B, Thibodeau P, Durgin FH. On intersectionality: visualizing the invisibility of Black women. *Cogn Res Princ Implic*. 2022;7(1):100. doi:10.1186/s41235-022-00450-1
57. Marr MC, Heffron AS, Kwan JM. Characteristics, barriers, and career intentions of a national cohort of LGBTQ+ MD/PhD and DO/PhD trainees. *BMC Med Educ*. 2022;22(1):304. doi:10.1186/s12909-022-03378-8
58. Orkin C. Reflections and intersections: disability, 'ableism' and metamodern leadership. *BMJ Lead*. 2023;2(2):88–90. doi:10.1136/leader-2022-000623
59. Verduzco-Gutierrez M, Wescott S, Amador J, Hayes AA, Owen M, Chatterjee A. Lasting Solutions for Advancement of Women of Color. *Acad Med*. 2022;97(11):1587–1591. doi:10.1097/acm.0000000000004785