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**Women in leadership and
the bewildering glass
ceiling**

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Marie A. Chisholm-Burns, Pharm.D.,
M.P.H., M.B.A., FCCP, FASHP, FAST,
University of Tennessee College of
Pharmacy, Memphis, TN.

Christina A. Spivey, Ph.D., LMSW,
University of Tennessee College of
Pharmacy, Memphis, TN.

Tracy Hagemann, Pharm.D., FCCP,
FPPAG, University of Tennessee College
of Pharmacy, Memphis, TN.

Michelle A. Josephson, M.D., University
of Chicago Medicine, Chicago, IL.

Address correspondence to Dr. Chisholm-
Burns (mchisho3@uthsc.edu).

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Geraldine Ferraro, a U.S. congresswoman and the first woman to run for U.S. vice president on a major party ticket, once stated that “some leaders are born women.”¹ There is little doubt that statement is true. However, former U.S. Senator and Secretary of State Hillary Clinton’s failed presidential bid against a male opponent who has never held public office has forced us to reflect on the state of women in leadership, particularly in our own fields of pharmacy, healthcare, and higher education. Throughout the campaign, Clinton was accosted by a barrage of misogynistic

attacks concerning, among other things, her “stamina,” a none-too-subtle implication that as a woman she was too weak to serve in the nation’s highest office. Rather than being an outlier, this rhetoric typified the experience of working women.² With a recent USA Today headline proclaiming “Sexism in the Workplace Is Worse Than You Thought,”³ it is clear that gender bias remains a challenge for women in the workplace, particularly as they try to move up the career ladder.

Women in work force sectors such as healthcare (including pharmacy) and academia, among others, are beset by an almost intransigent obstacle to their leadership aspirations. The accepted term commonly used to describe this plight of women in the work force is glass ceiling, which refers to the invisible barrier that many women face as they advance through the ranks of their chosen professions but are able to progress only so far before being stymied in their efforts to reach the upper echelons. Despite social movements and evolving laws and practices, various factors that support and, in some cases, strengthen the glass ceiling ultimately contribute to underrepresentation by women in leadership roles.

The hard-fought though ultimately fruitless battle of Clinton has inspired us to confront the challenges we and other women in pharmacy, the broader healthcare sector, and academia encounter on a daily basis as we pursue advancement and recognition. With the exception of the few women who have transcended the boundaries of the

glass ceiling, the bewildering barricade still exists. It is bothersome to us as professional women, and it should be bothersome to all who value equal opportunity. The glass ceiling prohibits both women and organizations from reaching their full potential and denies us all of the maximal benefits of gender diversity in leadership. As the struggle to permanently obliterate the glass ceiling continues, what can be done to promote women leaders in the pharmacy profession? This commentary will attempt to provide some insights to help address this question by (1) examining the extent to which women have achieved leadership positions in select industries and sectors, (2) discussing the benefits of women's leadership and the barriers women face in becoming leaders, and (3) elucidating strategies to overcome barriers to women in leadership. It should be noted that because the literature on women in pharmacy leadership is woefully limited, this commentary will delve into the knowledge bases of other professions and extrapolate information that may shed light on the state of female pharmacy leaders, including possible solutions to increase leadership opportunities and aspirations.

Women in leadership roles:

By the numbers. A recent report on women's leadership stated, "... when women thrive, organizations thrive— and nations thrive too."⁴ Women constitute slightly more than 50% of the U.S. population, represent approximately half of the labor force, serve as breadwinners in over 40% of homes, and control 70–80% of

consumer purchasing and spending.^{5–8} Women earn approximately 60% of all bachelor's and master's degrees and approximately 50% of doctoral degrees, and they hold approximately 50% of managerial and professional-level jobs.^{4,9} Yet, despite their advanced degrees and ubiquitous work force presence in most professional sectors, including healthcare, business, and higher education, women are often absent from leadership roles such as chief executive officer (CEO), board member, president, and dean. Perhaps no sector has been more publicly scrutinized for its gender disparities than the corporate world. An August 2016 headline in *The Wall Street Journal* noted, "Female CEOs, Still a Rarity, Face Extra Pressures."¹⁰ Likewise, in March 2015, media outlet CNN ran a news feature titled "Still Missing: Female Business Leaders," which described concerns regarding the scarcity of women corporate executives.¹¹ Among Fortune 500 and S&P 500 companies, women represent only 4–5% of CEOs and hold less than 25% of executive- and senior-level positions and less than 20% of board seats.^{4,9,11} Women are even more underrepresented in the leadership ranks of midcap and private businesses, holding just 4.5% and 6% of executive positions, respectively, at those companies.⁹ The CNN article also noted that "the pipeline of future women leaders is alarmingly thin."¹¹ Considering that women are 30% less likely than men to be promoted from entry-level to managerial-level positions, it is clear that companies are missing opportunities to develop future leaders, thereby squandering prospective women trailblazers.¹² The prospects for women's leadership improve

very little when we shift our focus to academia and healthcare.

In higher education, women are generally overrepresented in entry-level faculty positions (e.g., instructor, assistant professor) and underrepresented in senior-level and administrative positions (e.g., associate professor, full professor, dean, president).⁹ Career development trends in academic programs in the health professions, specifically pharmacy, medicine, and dentistry, display similar patterns despite years of a strong pipeline, as more than 60% of pharmacy school graduates and more than 45% of medical and dental school graduates are women.¹³⁻¹⁶ In U.S. medical schools, only 38% of full-time faculty, 21% of full professors, 15% of department chairs, and 16% of deans are women.¹⁷ The numbers are similarly troublesome in dental schools.^{16,18} While academic pharmacy has made some progress, gender gaps remain, with women representing about 50% of full-time faculty but only 30% of full professors, 31% of department chairs, and 26% of deans.¹⁹ In contrast, women dominate academic nursing, representing 85–95% of graduates and about 95% of full-time faculty and deans.²⁰ However, nursing has the benefit of a history of women playing a central role in the profession since Florence Nightingale's pioneering work and the advent of modern nursing in the 19th century.²¹ It is our hope that a female work force of 85–95% will not be required in other professions to achieve gender equity in leadership.

Outside of academic programs in the health professions, women compose the majority of

the work force in more than 80% of healthcare occupations.²² However, their prevalence has not translated to greater representation in leadership roles: Only 25% of leaders in the healthcare sector are women.⁹ For example, women constitute almost 54% of the pharmacy work force but only a quarter of independent pharmacy owners.^{22,23}

More concerning, only 18% of hospital CEOs are women, and the pipeline may be narrowing.⁹ A 2012 survey of healthcare executives conducted by the American College of Healthcare Executives (ACHE) noted a substantial disparity in the proportions of women and men who advanced to CEO positions.²⁴ Between 2006 and 2012, women achieved CEO positions at 50% of the rate of their male counterparts—a decline from the 63% rate reported in a 2006 ACHE survey.²⁴

The ACHE study produced two noteworthy findings that may offer some insight as to why women lag behind men in advancing to healthcare leadership roles.²⁴ First, a greater proportion of men than women were assigned general management roles (62% versus 50%), while women tended to hold more specialized or niche management roles. Because they involve a wider array of skills and responsibilities, general management roles such as pharmacy manager are considered to provide better leadership preparation than niche roles such as transitions-of-care project director. Second, a greater percentage of men achieved their first leadership position at the rank of vice president or higher. These findings suggest that women more often work in roles that may hinder progression to higher-

level leadership positions and have fewer opportunities to break into the leadership ranks.

The numbers are clear and definitive: Women are severely underrepresented in leadership positions across not only the business sphere but academic health professions programs, pharmacy, and healthcare in general. These disparities cannot be attributed to lack of education, as women are earning bachelor's degrees and graduate or professional degrees at generally equivalent or higher rates than men. Thus, we must look elsewhere to explain gender-based leadership gaps.

Benefits of women in leadership.

Negative outcomes certainly are not to blame for the lack of women leaders. In fact, studies conducted across the globe have found that inclusion of women in business leadership has significantly improved such factors as firm value, financial performance, economic growth, innovation, insolvency risk, and social responsiveness and philanthropy.²⁵⁻³⁷ Catalyst, a nonprofit organization focused on advancing women in the workplace, noted that companies with the highest number of women board directors had substantially greater return on equity, return on sales, and return on invested capital than companies with the lowest numbers of women board directors.³⁸⁻⁴⁰ Additional benefits of women on corporate boards include more stringent monitoring and oversight and fewer legal infractions such as fraud and embezzlement.^{41,42} As Warner⁴³ stated, "Women appear to lead in

ways that challenge existing hierarchies and . . . tend to be more exacting stewards of their companies." According to McKinsey & Company¹² and other sources, a critical mass of about 30% representation by women on boards correlates with corporate outperformance in various measures relative to performance at companies with boards composed mainly or only of men.^{26,27,37}

Why does the presence of women make such an impact? Because increased diversity is needed to combat homogeneity of ideas, as "too much sameness stifles critical thinking and breeds complacency and overconfidence."⁴³ Per Boatman et al.,⁴⁴ "Having a better balance of women in top leadership positions can mean a more diverse team of leaders with different perspectives and a greater ability to contribute new ideas." A report by ACHE noted that the transformational leadership style often used by women tends to be a good fit for contemporary organizations, as it fosters employee morale, motivation, and performance.^{45,46} Moreover, the presence of women on organizational teams can enhance performance. A study on "collective intelligence," defined by Woolley and colleagues⁴⁷ as the ability of a team to perform specified tasks, found that groups with more women members had higher collective intelligence than those with fewer women members. This finding was largely attributed to social sensitivity, or awareness of social context and cues—a characteristic women scored significantly higher on than men.

Research on leadership behaviors provides

some additional insight. In a study of 9 leadership behaviors that have a positive impact on organizational performance, women used 5 behaviors more often than men: people development, role modeling, inspiration, expectation and rewards, and participative decision-making.⁴⁸ A survey of top management executives found that 4 of these 9 behaviors (3 of which were noted more commonly in women)—inspiration, expectation and rewards, participative decision making, and intellectual stimulation—were rated as the most important for organizational performance.⁴⁸ More than 70% of study participants indicated that these 4 behaviors were underrepresented in their organization's current leadership. This is not surprising when one considers the deficit of women in leadership roles.

Why, then, is it so difficult for women to advance to senior-level positions within organizations across a variety of work force sectors? The reason is certainly not a lack of public confidence in their abilities. A survey published by the Pew Research Center in 2015 found that a majority of Americans believe women are as qualified and capable as men to hold leadership positions in business and politics and government.⁴⁹ The majority of these same respondents believed women and men are equally intelligent, innovative, honest, ambitious, and decisive—all of which are rated as important leadership traits. The survey also inquired as to why women were not achieving leadership positions. The predominant themes that emerged from the responses pertained to societal and cultural limitations: Women are held to higher standards than men, and the

United States is simply not ready to hire or elect women leaders.

Barriers in the path to women's leadership.

With the aforementioned Pew Research Center study as one example,⁴⁹ considerable research has been devoted to identifying barriers women face in pursuing executive and senior-level positions; some of the most common barriers are highlighted on page 315.^{6,12,14,24,43,50,51} According to the National Academy of Sciences, "It is not talent, but unintentional biases and outmoded institutional structures that are hindering the access and advancement of women."⁵² Both conscious and unconscious biases and gender stereotypes play a substantive role in impeding women's access to senior and executive level positions.⁵⁰ Typically "male" characteristics are commonly used as the default or standard expectation by which women leaders are hired, retained, or promoted, while typically "female" characteristics are devalued.⁵³⁻⁵⁶ Women often face different expectations than men in the workplace, as well as increased scrutiny for reasons other than ability (e.g., appearance), and are frequently evaluated more severely, particularly women in management and leadership roles.^{6,51} Women also face the dilemma of being perceived as too feminine (i.e., too "soft") or not feminine enough (i.e., too "tough").⁵¹ Johns and others^{6,51} noted that women tend to be "penalized for displaying either too little or too much assertiveness, competitiveness, and independence." The

warmer, less direct communication approach typically used by women may undermine confidence in their capabilities, again due to the appearance of being too soft.⁶ Women thus face a double burden in their careers if they want to get ahead: not only doing their jobs well but also overcoming stereotypes that may hamper perceptions of their leadership potential.

Even venerable organizations such as the National Institutes of Health (NIH) face accusations of gender bias, both in employment practices and in grant-funding decisions. A Washington Post article published in August 2016 described claims that conscious and unconscious gender biases have influenced decisions regarding the tenure of women scientists at NIH, where just 22% of tenured research scientists are women.⁵² Additionally, a recent study published in *Academic Medicine* found significant gender-based differences in the review of grant-renewal applications in the NIH Research Project Grant program (the R01 program), with women principal investigators earning significantly worse scores on grant reviews than their male counterparts.⁵⁷ The study's textual analysis also provided evidence that different standards were applied to the grant applications of men and women.⁵⁷ Further, evidence suggests that race and ethnicity may play a role in disparities in NIH funding, with Asian and black women being less likely to receive funding than white women.^{58,59} As noted by Kaatz et al.,⁵⁷ failure to gain traction in NIH R01 funding may stall women's career aspirations, preventing their advancement as researchers and

academicians. To mitigate the damage done to the careers of women, it is incumbent upon NIH and other institutions across the United States to directly confront and resolve issues of overt and implicit gender bias. Without such action, institutional leadership will remain squarely within the province of men, and women will have little motivation to change the status quo, much to the detriment of organizational growth, performance, and innovation.

Due to pervasive gender biases, stereotyping, and inadequacy or dereliction of organizational response to those issues, women may not consider pursuing a leadership position or believe they have the skills or personality necessary to lead. Relative to men, women may take fewer career risks and participate less (or not at all) in formal leadership training and activities. A lack of early leadership engagement, in particular, thwarts development of what is referred to as a "leadership mentality."^{6,12} To better understand why developing a leadership mentality may be so difficult for women, we must first recognize that women are marginalized in a litany of ways that favor their male colleagues. For example, women get fewer challenging assignments, have fewer opportunities to meaningfully participate in meetings and provide input on significant decisions, and receive less acknowledgment that their contributions are recognized and valued.¹² The cumulative effect of such exclusions is that women may have less self-confidence, are more likely to view their gender as a barrier to advancement, and are less likely to aspire to senior

leadership positions.¹² This is true even for women who have made some progression up the leadership ladder. As an example, women healthcare executives are far less likely to covet CEO positions than men at a disparity of 37% to 66%, respectively.²⁴ This begs a question: How can women hope to secure a foothold in the C-suite (a term referring to the top level of organizational leadership) if we do not allow ourselves to want to be there?

The deficit of women in leadership positions serves as a catalyst for another critical barrier: the lack of role models, sponsors, and mentors for women who are up-and-coming potential leaders.^{43,60} The lack of role models, in particular, may feed into the lack of a leadership mentality among women; if they do not see other women successfully attaining leadership positions, they may not believe that they themselves can achieve such positions. Additionally, the importance of mentorship and sponsorship to the success of women pursuing executive and senior roles cannot be overstated.^{6,14,61} Mentors and sponsors may play a key role in encouraging women to pursue leadership positions, particularly during the vital early career period. Mentors are imperative, as they act as advisers who offer career guidance and assistance in navigating organizations; it is equally important to have sponsors, who take on the role of promoter—someone who markets, advocates, or advances the cause of others.^{6,61} However, research has demonstrated that women may not have access to needed mentors and sponsors,⁶⁰ particularly those of the same gender, which has been rated as an important criterion in mentor selection. A

lack of mentors or sponsors may negatively affect women in unique ways. For example, in reporting on their study of gender-based differences in productivity among medical faculty, Raj and colleagues⁶² speculated that women faculty members who do not have supportive mentors may have more trouble getting articles they have authored accepted by refereed publications, which may have contributed to the lower rate of publication found among women versus men. This finding is concerning because publishing is a critical factor for promotion to higher faculty ranks.

Impeded access to mentors, who might be able to share their own experiences and provide guidance, likely exacerbates a particular challenge for women in their professional lives: achieving work–life balance. Organizations may lack supportive policies, such as maternity (or parental) leave, and flexible scheduling options that accommodate family responsibilities.^{24,50} Evidence suggests that, in general, men are less likely to assume these responsibilities, leaving women to shoulder the burden.^{24,50} This “second shift,” wherein women work a full day (or shift) outside the home and then return home to another full day’s work of caregiving and household tasks, often competes with career demands.⁵⁴

Additionally, women frequently have to take time away from work due to caregiving responsibilities and face serious consequences in their careers as a result of family responsibilities.^{6,63} One such consequence is that attempts to balance work with family obligations may delay women

from advancing through career ranks. As a result, some women may feel forced to choose between having a family and having a career. Some research suggests that women may have fewer children or forgo having children altogether due to career aspirations and pressures.^{24,64} Nowhere is this more evident than in academia, where 44% of tenured women faculty remain childless.⁶⁴ And let us draw a distinction: We are fully in support of women remaining childless if they so choose; however, if women feel they are deprived of that choice due to untenable career pressures, expectations, or penalties, that is unquestionably problematic. Another aspect of family responsibilities that may have a negative impact on women is reduced mobility.^{54,65} In the previously mentioned ACHE survey, less than 60% of women healthcare executives, as compared with greater than 75% of men, reported a past willingness to move in service of career advancement.²⁴ If women are unable to relocate, this will severely restrict the pool of leadership positions that they can seriously pursue.

Another barrier directly related to work–life balance is the “leanout” phenomenon, whereby “women [are] opting to slow or stop their highly demanding careers.”⁴³ For example, more than two thirds of high-achieving women, defined as “those with graduate degrees or bachelor’s degrees with honors,” decrease their work hours (possibly to parttime status or a flex-time schedule) at some point during the course of their careers, and approximately one third take extended leave from their jobs.⁴³ Such career “off-tracking” can be detrimental to women,

Barriers to Participation of Women in Organizational Leadership Roles^{6,12,14,24,43,50,51}

- Conscious and unconscious biases
- Lack of mentality to pursue leadership
- Lack of mentors, role models, and sponsors
- Lack of policies that support work–life balance
- Work–life integration challenges
- “Lean-out” phenomenon
- Lack of internal and external networks, recognitions, opportunities, or resources

particularly in comparison to men who remain in full-time service to their employment pursuits and career aspirations. Therefore, well-publicized organizational policies and practices that normalize more flexible work schedules and prioritize quality of work over “time served” would be a tremendous help in overcoming work–life obstructions to increased involvement by women in leadership roles.

An additional important barrier to leadership is a lack of internal and external networks, recognitions, opportunities, and resources. For a variety of reasons, women may have fewer opportunities to develop formal and informal networks, both within and external to their institutions. Those reasons include but are not limited to some women’s restricted availability to attend professional organization meetings (where networking often occurs) due to family or work commitments, a lack of sponsors to introduce them to internal and external leaders and decision-makers, and issues of gender bias within institutions. Studies have found that male managers and

executives have greater informal networks, social interactions, and substantive work interactions with senior leaders than do female managers and executives, which may be advantageous when pursuing higher-level positions.^{12,24} Being excluded from the “good old boys network” disadvantages women, who often miss out on decision-making and other opportunities to demonstrate their leadership acumen.⁵¹ Compounding the problem, it is not uncommon for women’s ideas to be neglected or outright ignored until they are proposed by a man.⁵¹

The style of leadership used by some women may also result in a lack of recognition for their efforts. For example, women may choose a facilitative or selfless style of leadership that highlights the accomplishments of the team rather than their own, taking little or no credit for their role in those successes.⁵³ This may create a perception that women leaders are not contributing to organizational achievements, which may in turn result in fewer high-profile assignments and restricted resources.

The salary gap: Show me the money.

The salary gap faced by women in the work force is a barrier to leadership worthy of special focus. Although multiple factors contribute to salary disparities, the Joint Economic Committee stated that as much as 40% of the gap is the result of discrimination.⁶⁶ On average, women in the United States make 79% of what men earn for the same job—a 21% gap in compensation.^{66,67} This gap

widens slightly when education is considered. Women with bachelor’s or advanced degrees make approximately 75% of what men with the same degrees earn and are often paid less than men with less education.⁶⁶ At the pinnacle of the “educational spectrum,” professional women earn just 58 cents for every dollar earned by their male counterparts.⁶ In select health professions, women pharmacists earn 87%, women medical scientists earn 79%, and women physicians earn 75% of what their male counterparts make.⁶⁷⁻⁶⁹ In the aforementioned ACHE survey, women healthcare executives earned 20% less than male executives.²⁴ Interestingly but not surprisingly, pay disparities are found even in those professions with traditionally large numbers of women (some with female pipeline dominance of greater than 95%); for example, female registered nurses earn only 90% of what their male counterparts are paid.⁶⁸ Salary inequities are also found in the sector of higher education, where women faculty members typically earn just 85–94% of what men earn at every rank (assistant, associate, and full professor) in 4-year public institutions and 4-year private nonprofit institutions.⁷⁰ Among academic leaders, less than 5 women made the Chronicle of Higher Education’s list of the 50 highest-paid chief executives at public universities in 2014–15.⁷⁰

A well-known slogan in the fight against gender-based salary disparities is “equal pay for equal work.” While the economic penalties in the salary gap are likely obvious, the psychological ramifications are more insidious. For example, Platt and colleagues⁷¹ found a significant association between the

Table 1. Strategies to Address Common Barriers to Involvement of Women in Leadership Roles^{a,b}

Barrier and Strategies	Responsible for Implementation		
	Institution or Employer	Individual	Professional Leadership or Organization
Conscious and unconscious biases 1. Provide seminars and workshops to help people identify and reduce unconscious biases.	X		X
2. Identify challenges that prevent aspiring women leaders from pursuing advanced career goals; individually design strategies to overcome challenges.	X	X	X
3. Have diverse and inclusive search committees.	X		
4. Conduct periodic work force assessment and surveys of work environment climate; use collected information for CQI initiatives to improve environment.	X		X
Lack of mentality to pursue leadership 1. Nurture the development of relationships among early female careerists and successful women leaders.	X		X
2. Be assertive in identifying role models and creating connections to potential mentors, coaches, and sponsors.	X	X	X
3. Proactively collect and share stories, case studies, and scenarios of how women have addressed gender, workplace, work–life integration, and leadership challenges.	X	X	X
4. Implement programs that share the successes of seasoned women leaders.	X		X
5. Cultivate leadership aspirations of early careerists; encourage them to proactively manage career plans.	X		X
6. Facilitate leadership development.	X	X	X
7. Actively recruit women into elected and appointed leadership roles and support their advancement by recognizing their volunteer contributions and achievements.	X		X
8. Develop a strategic career plan focused on personal skill development; meet with senior leaders to voice aspirations.		X	
9. Seek applicable education and training (e.g., advanced degrees, residency training, skills-based leadership training) to support career trajectory.		X	
10. Recognize that one's career progression is a journey and that each transition entails a new level of commitment and dedication to work–life integration.		X	
11. Be assertive in negotiating, designing, and applying work models that meet the needs of employers as well as individual professional and personal needs.		X	
12. Encourage aspiring leaders to seek and take on visible, important, and complex roles and projects and to work diligently to be successful in producing results.	X	X	X

Barrier and Strategies	Responsible for Implementation		
	Institution or Employer	Individual	Professional Leadership or Organization
13. Identify challenges that prevent aspiring women leaders from pursuing advanced career goals; individually design strategies to overcome challenges.	X	X	X
Lack of mentors, role models, and sponsors 1. Nurture the development of relationships among early female careerists and successful women leaders.	X		X
2. Develop and implement mentoring, coaching, and sponsorship programs; provide appraisals and feedback.	X		X
3. Be assertive in identifying role models and creating connections to potential mentors, coaches, and sponsors.		X	
4. Report the number of women in leadership positions and assess inequities.	X		X
5. Develop a strategic career plan focused on personal skill development; meet with senior leaders to voice aspirations.		X	
6. Make introductions between aspiring leaders and current influential leaders.	X		X
7. Expand professional networks of emerging leaders; promote interactions with seasoned and successful leaders.	X	X	X
8. Share profiles, stories, and recommendations of successful female pharmacy leaders with others.	X		X
9. Identify challenges that prevent aspiring women leaders from pursuing advanced career goals; individually design strategies to overcome challenges.	X	X	X
Lack of policies that support work–life balance 1. Promote programing for work–life integration; identify and share strategies for success within organization.	X		X
2. Share successful pharmacy employer policies and practices for building supportive work environments.	X		X
3. Develop, assess, and share inclusivity policies and practices to support successful engagement and participation.	X		X
4. Identify challenges that prevent aspiring women leaders from pursuing advanced career goals; individually design strategies to overcome challenges.	X	X	X
5. Examine and consider implementation of organizational policies to provide work–life balance (e.g., flexible hours, job sharing)	X		
Work–life integration challenges 1. Proactively collect and share stories, case studies, and scenarios of how women have addressed workplace, work–life integration, and leadership challenges.	X		X

Barrier and Strategies	Responsible for Implementation		
	Institution or Employer	Individual	Professional Leadership or Organization
2. Recognize that one's career progression is a journey and that each transition entails a new level of commitment and dedication to work–life integration.		X	
3. Identify challenges that prevent aspiring women leaders from pursuing advanced career goals; individually design strategies to overcome challenges.	X	X	X
4. Promote programming for work–life integration.	X		X
The "lean-out" phenomenon 1. Implement programs that share the successes of seasoned women leaders.	X		X
2. Recognize that one's career progression is a journey and that each transition entails a new level of commitment and dedication to work–life integration.		X	
3. Identify challenges that prevent aspiring women leaders from pursuing advanced career goals; individually design strategies to overcome challenges.	X	X	X
Lack of internal and external networks, recognitions, opportunities, or resources 1. Periodically assess salaries and bonuses for gender disparities and make appropriate adjustments.	X		
2. Collect data concerning the number of women in leadership positions and assess inequities.	X		X
3. Proactively collect and share stories, case studies, and scenarios of how women have addressed gender, workplace, work–life integration, and leadership challenges.	X		X
4. Develop, assess, and share inclusivity policies and practices to support successful engagement and participation.	X		X
5. Actively recruit women into leadership positions and support their advancement by recognizing achievements.	X		X
6. Develop a strategic career plan focused on personal skill development; meet with senior leaders to voice aspirations.		X	
7. Be assertive in negotiating, designing, and applying work models that meet the needs of employers as well as individual professional and personal needs/aspirations.		X	
8. Promote positive career changes, education, and training to facilitate goal achievement.	X	X	X
9. Identify challenges that prevent aspiring women leaders from pursuing advanced career goals; individually design strategies to overcome challenges.	X	X	X
10. Create and provide opportunities for participation in formal education and training programs that have been effective in fostering career advancement.	X		X
11. Offer and/or support educational and training programs and personal development opportunities to build skills.	X		X
12. Encourage aspiring leaders to seek and take on visible, important, and complex roles and projects and to work diligently to be successful in producing results.	X	X	X

salary gap and increased rates of depression and anxiety disorders among women relative to men; mood disorder rates were alleviated when women's income exceeded that of men. We further speculate that the devaluation of women's work and contributions, as symbolized by the salary gap, may have the effect of discouraging women from aspiring to leadership roles, thus resulting in fewer women pursuing such positions and causing even greater deficits in women's leadership.

Barriers to women's leadership are numerous, expansive, and entrenched in the organizational and societal psyche. It would be tempting to simply be satisfied with the progress already achieved—to stop the often exhausting and disillusioning fight for gender parity. However, such capitulation would be an unforgivable betrayal of the women who came before us who fought, marched, and sacrificed to make our lives a little easier and our ambitions a little more reachable. Our choice, then, is to carry on and propose a way forward. What follows is a multilevel call to action and an enumeration of strategies to dismantle the various obstacles to women's leadership offered in the hope of achieving a more equitable future for all women leaders.

A call to action: Strategies to overcome barriers in the path to leadership.

The ASHP Women in Pharmacy Leadership Steering Committee recommended that strategies to promote women's leadership must be developed and implemented on multiple levels: the individual level, the

institution/employer level, the professional leadership or organization level, and, ultimately, the societal level.⁷²⁻⁷⁴ Table 1 presents examples of wide-ranging strategies “mapped” to common barriers discussed earlier in this article.^{72,73}

At the institution/employer level, organizations must prioritize gender equity and be deliberate in their efforts to expand leadership opportunities for women; this includes creating comprehensive programs and policies that address barriers limiting the access of women to leadership career tracks. Organizations should actively recruit, develop and train, and support women in leadership roles; implement formal mentoring and coaching programs; assist in identifying sponsors; and enact policies that facilitate work–life balance (for example, providing resources for childcare or eldercare and flexible work options).^{6,45,55,61,74} Hiring and promotion processes and policies, as well as decisions regarding compensation, should be reviewed and monitored to ensure that they are fair and uninfluenced by gender bias.^{55,75,76} As part of developing more equitable hiring practices, organizations should use diverse search/hiring committees where applicable and provide training that addresses conscious and unconscious (implicit) gender bias.^{60,76} Other strategies recommended for organizational consideration in efforts to improve representation by women in leadership roles include^{45,72,73}

- Setting targets for advancing women in leadership roles (for example, having a goal that 50% of executive positions

will be filled by women),

- Tracking leadership metrics (e.g., the number of women versus men in leadership roles relative to the entire work force) and studying and appropriately correcting detected inequities,
- Identifying and cultivating potential women leaders early in their careers,
- Sharing the success stories of women leaders to inspire others,^{55,61,72,73}
- Succession planning, with consideration for women candidates within the institution, and
- Zero tolerance policies for sexual harassment.

At the individual level, women must also act as their own advocates by seeking out networks, sponsors, and mentors; building social capital; and marketing themselves and their contributions to the organization.⁶ Women in CEO and senior-level positions offer the following advice to women:^{61,74,75,77,78}

- Be appropriately assertive in promoting yourself.
- Build a network by making yourself known to individuals internal and external to your organization, particularly those with connections to industry leaders.
- Find allies and champions (i.e., sponsors and mentors) who are willing to share knowledge and advocate on your behalf. Mentors are regarded as a valuable resource, orienting mentees to new roles, providing encouragement,

and assisting in building confidence.^{53,55,78} Although there may be some preference for having a same-sex mentor, male mentors may have a positive effect on the career trajectory of women managers.⁶¹ Thus, be open to having both male and female mentors.⁵⁵ Additionally, sponsors are critical to open doors, get your name in front of the right people (i.e., those making hiring and promotion decisions), and act as a proponent of your advancement.

- Identify role models, as they are important for up -and- coming women leaders. Role models demonstrate leadership pathways and possibilities.⁵¹ If role models are not available in your organization, consider women leaders in other organizations or industries and how their experiences may inform your own.
- Develop a career plan and consider pursuing additional education (e.g., a graduate degree in management or administration). Early leadership experiences are critical in fostering a leadership mentality. Such experiences expose women to their potential as leaders and build self-confidence, giving them a foundational leadership repertoire to build upon.⁵¹
- Pursue leadership training and develop leadership and management skills (e.g., hiring and developing employees, setting goals, conducting evaluations).
- Say “yes” to challenging tasks and assignments that others shy away from; such tasks are a way

to demonstrate capabilities and distinguish yourself.

Professional leaderships or organizations can facilitate the careers and leadership roles of women in many of the same ways institutions and employers can. The first step is to identify promotion of women to leadership roles as a priority and goal. For example, ASHP organized a steering committee focused on women's leadership, while other pharmacy organizations include special interest groups and sections devoted to women's issues within the profession. Among the strategies that professional leaderships or organizations can offer are mentorship, sponsorship, and other career development programs; networking by current and aspiring leaders; dissemination of success stories of women leaders in the field; and promotion of policies supportive of work–life balance.^{72,73}

At the societal level, there are several legal and policy changes the federal government should consider to facilitate a culture that is more supportive of women in the work force. For example, following the cues of nations such as Finland, Norway, and Sweden, legislation concerning parental leave, provisions for childcare and eldercare, and flexible work pathways may help to expand options for managing work–life balance for both women and men.⁴³ The United States should also strive to reduce and, ultimately, eliminate salary disparities among women and men to finally achieve equal pay for equal work.

Future studies should evaluate the efficacy of the proposed strategies in reducing

or eliminating barriers to leadership in pharmacy, in the broader healthcare sector, and in academic settings. An additional topic worthy of future research is the intersection of race/ethnicity and gender and the impact on women's access to and achievement of leadership positions. Although women of color and white women face several overlapping barriers to leadership roles, the issue of race/ethnicity adds a greater layer of complexity, and other biases, to the professional lives of minority women that should be more fully evaluated, appreciated, and acted upon. We strongly urge the publication of follow-up articles that delve into the evidence concerning the compounded effects of race/ethnicity and gender, as well as other critical factors such as sexual orientation and ageism, in professional and leadership roles and strategies for overcoming these challenges.

CONCLUSION

Since the latter half of the 20th century, women have made great strides in increasing their representation in the work force. However, a considerable gap remains in achievement of leadership positions across fields such as healthcare, including pharmacy. Thus, the bewildering glass ceiling remains intact and, at times, seemingly invulnerable. Despite considerable research demonstrating numerous beneficial outcomes associated with the inclusion of women in organizational leaderships, a variety of barriers impede the advancement and aspirations of potential women leaders in the pharmacy profession. Such barriers include cultural biases and

stereotypes, challenges involving work–life balance, and a lack of mentors and sponsors. To overcome these barriers, strategies including interventions to reduce gender bias, leadership development programs, access to mentors and sponsors, and changes to family-related policies should be addressed on the individual, institution/ employer, professional leadership/ organization, and societal levels. If the pharmacy community engages in soul-searching and reflection, sincerely deploys the strategies suggested here on a widespread basis, and makes concerted proactive efforts, achievement of proportionate and equitable representation and compensation of women in pharmacy leadership roles can be an entirely realistic goal. Renowned feminist Gloria Steinem⁷⁹ perhaps stated it best: “Clearly no one knows what leadership has gone undiscovered in women” We believe it is far past time we strive to find out and finally shatter the glass ceiling.

Disclosures

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