Why Aren't There More Women Leaders in Academic Medicine? The Views of Clinical Department Chairs

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ABSTRACT

Purpose. A scarcity of women in leadership positions in academic medicine has persisted despite their increasing numbers in medical training. To understand the barriers confronting women and potential remedies, clinical department chairs with extensive leadership experience were interviewed.

Method. In 1998–99, open-ended interviews averaging 80 minutes in length were conducted with 34 chairs and two division chiefs in five specialties. Individuals were selected to achieve a balance for gender, geographic locale, longevity in their positions, and sponsorship and research intensity of their institutions. The interviews were audiotaped and fully transcribed, and the themes reported emerged from inductive analysis of the responses using standard qualitative techniques.

Results. The chairs' responses centered on the constraints of traditional gender roles, manifestations of sexism in the medical environment, and lack of effective mentors. Their strategies for addressing these barriers ranged from individual or one-on-one interventions (e.g., counseling, confronting instances of bias, and arranging for appropriate mentors) to institutional changes (e.g., extending tenure probationary periods, instituting mechanisms for responding to unprofessional behavior, establishing mentoring networks across the university).

Conclusion. The chairs universally acknowledged the existence of barriers to the advancement of women and proposed a spectrum of approaches to address them. Individual interventions, while adapting faculty to requirements, also tend to preserve existing institutional arrangements, including those that may have adverse effects on all faculty. Departmental or school-level changes address these shortcomings and have a greater likelihood of achieving enduring impact.

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Women are seriously underrepresented among the ranks of senior faculty and positions of leadership in academic medicine. In 1999, 27% of full-time medical school faculty were women, but only 15% of tenured faculty, 11% of full professors, and 6% of chairs of academic departments were women.[1] Cohort studies comparing men and women medical school faculty have found that —even after adjusting for number of publications, amount of grant support, tenure versus other career track, number of hours worked, and specialty— women remain substantially less likely than men to be promoted to senior ranks.[2–5] The persistent scarcity of women in leadership positions in academic medicine is a national concern[6,7] and raises questions about women's access to effective mentors, career development opportunities, and a work environment that is free of gender bias. In view of the leadership needs of medical schools and the unrealized potential of women in the profession, academic medicine must address why it is that, 25 years after substantial numbers of women began entering medical school, so few women are on successful pathways to leadership. We interviewed clinical department chairs to elicit their insights into the causes of this problem and potential remedies.

We focused on the perspectives of department chairs in this study for two reasons. First, these men and women had achieved positions of leadership, which gave them a singular perspective and extensive personal experiences to draw upon in reflecting on the challenges that others face. Second, chairs

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have the power to influence the processes through which academic faculty are promoted and recruited for leadership. The views of leaders at this tier have not been studied. A drawback of focusing on chairs is that their outlooks may be skewed by virtue of their having succeeded, many of them in a different era and most without the burden of minority status. One chair interviewed for this study cautioned:

> I'm a dinosaur. I really am. . . . When I went through medical school I was one of a small number of women. When I went through [graduate training] I was, at times, the only woman in the department. I'm more socialized toward a male model, perhaps, so I don't think of myself when I'm sitting around a room with a bunch of department heads and there's me and one other female department head there, it doesn't strike me as odd, you see. So I may not be the best person to ask. (Woman)

However, in addition to their potential to deepen our understanding of the barriers women face and strategies for addressing them, the chairs' views on the scarcity of women in positions of leadership in academic medicine are important to examine because they are likely to set the agenda for developing future policies in this realm.

Method

The study was designed to yield a comprehensive account of chairs' views of the types and sources of barriers to advancement women faculty face, as well as their strategies for eliminating them. The magnitude of the problem, the lack of prior relevant research, and the value of capturing subtleties in the views of chairs necessitated a qualitative approach to this topic. The methodologic procedures we used conformed to prescribed standards of qualitative research,[8] including systematic sampling, an inductive data-collection and analytic strategy, and concern for reliability and validity in analyzing the data and reporting findings. This method, by virtue of the density of data collection and the inductive style of analysis, was designed to maximize the validity of the findings for the sample of respondents. Further, the respondents were chosen to assure the relevance of the conclusions to a broad range of settings and circumstances.

Table 1

Characteristics of a Strategic Sample of 36 Department Chairs Interviewed about the Scarcity of Women in Leadership Positions in Academic Medicine, 1998–99

Characteristic	No.
Gender	
Men	22
Women	14
Specialty	
Surgery	7
Ostetrics and gynecology	8
Clinical pathology	7
Internal medicine	9
Family medicine	5
Longevity in the position	
<5 years	15
5–9 years	10
≥10 years	11
Sponsorship	
Private institution	8
Public institution	28
Geographic location	
Northeast/Mid-Atlantic	13
Midwest	9
South	8
West	6

One of the authors (MJY) interviewed a systematic sample of 34 chairs and two division heads for an average of 80 minutes each in 1998–99. The sample was drawn to facilitate study of women and leadership as well as to support a second focus on the challenges confronting chairs of clinical departments (to be reported elsewhere). Accordingly, all of the chairs were from five specialties (surgery, obstetrics and gynecology, clinical pathology, internal medicine, and family medicine) that were specifically chosen to assure an adequate number of women chairs (e.g., obstetrics and gynecology) as well as the representation of departments likely to have high-profile roles in addressing major conflicts confronting academic medicine (e.g., internal medicine and surgery). In order to increase the number of women surgeons in the sample, two division chiefs were interviewed along with the chairs. Within each specialty, individuals were chosen to achieve balance with regard to gender, geographic locale, longevity in the position, and sponsorship of the institution (see Table 1) based on the AAMC's faculty roster system and consultation with staff of the chairs' organizations.

The questionnaire was structured to elicit at the outset the respondents' perspectives without bias by any references to gender issues that are discussed in the literature. Accordingly, initial questions were phrased broadly, asking respondents to report their own views of the forces that have produced the scarcity of women in leadership positions in academic medicine. Then, structured but open-ended questions probed their views on specific considerations, including policies for faculty promotion and tenure, recruitment processes, mentors for women, the role of sexism, and distinctive challenges encountered by women leaders once on the job. The questionnaire was formatted to capture insights that were not foreseen by the researchers. To assure that the questionnaire covered issues that could be anticipated to be important, the executive staff and pertinent committees of the Association of American Medical Colleges (AAMC) reviewed a draft of the questions, and their suggestions were incorporated as appropriate.

The interviews were audiotaped, fully transcribed, and subjected to inductive analysis using standard qualitative techniques.[9] Glaser and Strauss's approach to discovering grounded theory[10] governed the identification of the types and sources of barriers confronting women, the means by which they exert influence, and strategies for intervention. Relying upon the constant comparative method,[10] categories of barriers were refined, as were their mechanisms of action (e.g., through institutional norms versus individual influence). The senior author, a sociologist with considerable experience conducting and publishing qualitative work, completed the initial coding process through (1) multiple readings of the transcripts to identify recurrent themes, (2) coding the transcripts by themes and creating files of relevant verbatim passages, (3) subdividing categories of passages to refine the concepts, (4) seeking explanations for discrepant cases (i.e., those that contradicted the dominant patterns), and (5) examining how the themes related to each other and to the central topic of the study. The second author, who has extensively explored issues confronting women in academic medicine, verified the relationships between the passages and the codes, as well as their relevance to the focus of the investigation. To further examine their validity, the cumulative list of themes was shared with the members of the AAMC's Committee on Increasing Women's Leadership in Medicine, who confirmed their salience.

Passages from the transcripts that typify chairs' and division heads' responses are quoted verbatim in this report, and the gender of each respondent is indicated. Where appropriate, the frequencies with which particular views were expressed are noted. The questions, however, did not force the respondents to comment on pre-specified points of view. Instead, the reported themes emerged from a systematic analysis of their comments. Consequently, any frequency presented here does not represent a reliable estimate of the extent to which a particular view is held by all of the respondents; rather it is a conservative expression of the prevalence of a specific belief or concern regarding barriers confronting women.

Results

Overview: Underlying Reasons for the Scarcity of Women in Leadership Positions

To set the stage, we first present analysis of the open-ended questions about the reasons underlying the scarcity of women in leadership positions in academic medicine. Three sets of forces affecting the professional advancement of women were revealed: historical developments, socialization patterns engrained in the broader society, and distinctive expressions of those patterns in medicine. These forces contribute to the specific barriers encountered by women faculty that were identified by the chairs, and they prefigure several of the issues that require attention in devising strategies for intervention.

Citing historical trends, 15 of the 36 respondents linked the scarcity of women in leadership positions to the late entry of women into the medical profession; only recently have women been accepted into medical school in sufficient numbers to advance to senior positions. On its face, this explanation describes a symptom rather than illuminating an underlying cause of or solution to the problem. However, for several respondents, the reference to historical developments appeared to suggest that the phenomenon will correct itself, with little or no concerted effort from the current leadership. Indeed, several chairs expressed their wariness of policies designed to accelerate the appointment of women.

> The first big thing I would say is, . . . you need patience. You have a whole generation of men that have run this and have been the faculty and been the practitioners. And it's all changing. And there are younger people coming up, many of whom are talented, but they're not yet there. So if you want to push it, you are going to cause more trouble than you're gong to get benefit out of it, in my opinion. (Man)

Highlighting constraints imposed by social forces outside medicine, 28 of the respondents cited traditional gender roles, such as taking care of children and family, as posing a major barrier to women's advancement. Chairs were consistent in their views of the consequences of these familial demands for the career trajectories of women: Women's roles in the family often preclude them from devoting essential time and energies to achieving milestones that are central to favorable tenure review and promotion, and these roles limit the geographic mobility that is often necessary to advance in the profession.

Several chairs also commented on problems posed by different socialization patterns for women and men in our society. One prominent theme in these accounts was that women are less likely to be encouraged to engage in behaviors that are conducive to moving up the ladder in the profession.

> Men in general compartmentalize their careers better, quite often to their detriment personally and in terms of their family life. But I think men in general are just socialized to be more aggressive about their careers and more exclusively devoted to their careers. And I'm not saying that's desirable or good necessarily. I just think it's true. (Man)

One chair identified the ability to overcome losses and to persist in the face of failure as a key prerequisite for successful competition. She believed that the early socialization of women does not encourage such tenacity:

> Nowadays girls are on the playing field. But men were socialized to play in teams and lose and the next day go back and do it again. And when you start moving up, you will fail. . . . I think there are more men who've been socialized that failure is okay, pick myself up and you know, move on. If you look at the CVs of many very prominent men in medicine, they had that job where they were only there 18 months. Somehow nobody remembered that. And they picked themselves up and they moved. (Woman)

Other chairs cited socialization patterns that predispose men toward leadership in public spheres and women, in personal realms.

> Most women are psychologically healthier than men in academic medicine, and can't see why they need to take responsibility for large groups of others. They'd rather be responsible for themselves and their family. To do a job like being chair, it does cost. There are stresses and strains. Or even a division chief. And I think that many women don't have the need in their ego structure. They're happy doing their research and succeeding in their families. (Man)

In contrast, several respondents asserted that those competencies and skills central to effective leadership, once on the job, are actually more prevalent in women than they are in men.

Making the connection between broad social forces and their distinctive expression in the medical environment, the chairs identified sexism as a key factor in their explanations of the scarcity of women as leaders in academic medicine. When they were asked if they had observed incidents of sexism or bias during the preceding year among colleagues or students at their schools, 22 of the 36 respondents replied affirmatively. Unsurprisingly, medicine—as a major social institution—offers a microcosm for witnessing the interplay of the same forces that shape the society at large. The chairs reported that instances of sexism had an adverse impact on training, recruitment, promotion, management, and assignment of routine academic responsibilities and committee work.

The chairs identified diverse strategies for increasing the numbers of women leaders in academic medicine that focused on recruiting more women as faculty, assuring their eligibility for promotion and tenure, and assisting them with gaining national recognition. A common theme relevant to progress in all of these spheres was the chairs' belief that mentors play a crucial role in facilitating change and yet, in many cases, adequate role models are not sufficiently available to women.

In sum, three barriers to advancement surfaced repeatedly in the analysis of the chairs' responses to open-ended questions seeking explanations for the scarcity of women as leaders: adherence to traditional gender roles; sexism, as manifested in the academic setting; and the lack of adequate mentors for women. What follows is an examination of the views of the chairs on the magnitude of the problems precipitated by each of these barriers and their suggestions for potential solutions.

Gender Roles: Family Versus Career

> [The problem in medicine] reflects our society as a whole. We do not value parenting. We do not value teaching. We do not value children. You look at a society like Sweden where children are highly valued, it's a very respectable profession to be a teacher, to be a child care provider. And men are expected to participate in the child care equally with women. And that is encouraged and supported. (Woman)

Most respondents located the origins of the constraints of gender roles in broad social values. Nevertheless, their comments reflected the assumption that medicine has the means to counteract the effects of these forces even though their roots lie beyond its institutional boundaries.

According to several respondents, a lack of adequate time for professional pursuits is not, in itself, the key issue for women; instead, time constraints *coupled* with the inflexibility of academic routines and promotion processes inhibit the advancement of women.

> There's no way you can move up the academic ladder part time. And I think that's a stumbling block. . . . A man who wants traditional family values can still devote time in the workplace that's needed. A woman who wants traditional family values rarely has the time to commit to devote to that. (Man)

Devotion to family responsibilities may also constrain professional advancement by limiting geographic mobility, which several women chairs cited as an obstacle.

> There are some very excellent women . . . who would make superb department heads who are just never going to because of family and kids. And that's a problem that I think is unique to women. And it is much harder to advance . . . to the point of being a department chair if you're not willing to move. (Woman)

When juxtaposing women chairs' career trajectories with their personal profiles, a sobering view of the consequences of the choices that routinely confront women in medicine emerged. Surveying her colleagues in obstetrics and gynecology, one respondent summarized:

> You look around at the women ob-gyn chairs in this country, we're either all divorced or lesbians or something. There is not really what society would call a normal set, just like you have all the normal male chairs. They all have a . . . wife who mostly is sitting at home or can go get the laundry or has a job that's eight to five, doesn't work

weekends, and/or whose job is going to take second place to their family. (Woman)

Women chairs who had succeeded in leadership testified to the difficult choices they had had to confront to surmount the confines of traditional roles.

For many of us as women who got where we were, we got there by delaying our rewards. We got here by not getting involved, not getting married and/or having children while in college or in medical school or even residency. (Woman)

Men respondents confirmed the salience of these constraints, acknowledging the extent to which their own career advancement depended upon sacrifices on the part of their wives.

I think somebody's going to suffer. Either the family or the academic . . . progression of the woman, unless the choice is not to have a family. . . . I'm still of the school which believes that if my wife didn't take the time before she started her career, that the family unit would have suffered. I didn't have the time nor the psychological bent nor the sense it was my responsibility. . . . There's a significant issue here for women who choose family responsibilities and . . . academic advancement. . . . It's just extra hard. (Man)

Another reflection of the burdens of such choices is the fact that so many successful women are described as superhuman.

Two of our chief residents actually had babies during their most rigorous clinical year. And I'm just tickled to death to see them . . . doing so well with that. . . . They had wonderful pregnancies. . . . I mean they were perfect, they're superstars. . . . You want to see regular people. You can't be a regular person and excel in this fairly nasty world at this point. . . . I would like to see that changed. (Woman)

The chairs' views on how to address the constraints on career advancement imposed by traditional gender roles can be categorized according to the scope of changes they require (Table 2). Their proposals ranged from adaptation of individuals to transformation of institutions; they made recommendations for counseling individuals to alter their construction of family life to allow them to more successfully comply with the existing demands of academic medicine, adapting faculty routines and promotion practices to be more hospitable to those heavily engaged in family responsibilities, and changing the role of chair and the expectations of incumbents.

Promote adaptations among individuals and their families. Most of these suggestions were made by women chairs, who drew upon their own experiences to advise their younger women colleagues. One chair explained that she advises young women who want to have families to bear children early in their careers:

I tell them (young women considering an academic career) what helped me . . . I had my children when I was young, as a resident, also of course, when it's biologically appropriate. . . . By the time I was needing to leave the kids to go to meetings like this, or to go give lectures, they were older. And by the time I became a department head, which was when I was 45, my youngest was 18, and he was ready to go to college. So I went to be department head without any kids at home. (Woman)

Others counseled women with families on the benefits of getting various types of help at home or advocated a renegotiation of the division of responsibilities among parents within the family. Further, one chair hoped that an increasing interest among men in playing a greater role in child rearing would culminate in significant change.

Obviously, the bearing of the children you can't change. At least not in our

Table 2

Strategies of Chairs for Addressing Conflicts between Traditional Gender Roles and Women's Advancement to Leadership Positions in Academic Medicine

Focus of Intervention	Suggested Strategies
Individuals and their families	Encourage young women who want to have families to bear children early in their careers Counsel women on the importance of getting various types of help at home Promote renegotiation of the division of family responsibilities among parents
Faculty routines and promotion policies	Alter faculty schedules and meetings to be more hospitable to parents with young children Establish day-care centers at medical schools Extend the probationary period prior to tenure decisions for faculty with heavy family responsibilities Establish less-than-full-time, tenure-track positions to more easily accommodate family and career responsibilities
Role of chair	Restructure the role so as to be less time-consuming Demonstrate the potential to effectively discharge the functions of chair while maintaining family commitments

lifetimes. But as the younger men want to get more involved in their family, they're going to force the issue. They're not going to work flat out and they won't go to the departments where they have to be there [incessantly] and how good they are is measured by how little time they are at home. They won't tolerate that. (Woman)

What distinguishes this observation from the others reported in this section, which rely upon individuals' changing their family lives to accommodate academic demands, is that this last assessment presumes a changing balance of power and broader social change—i.e., men who want to play a more active role in child-rearing while advancing their careers will constitute a potent force for pervasive changes in the workplace, making it more responsive to both men and women with heavy family responsibilities.

Change faculty routines and promotion policies. These options rely on alteration of institutions rather than individuals: scheduling of meetings and other essential activities at times that are more accessible to those faculty who have child-care responsibilities, creating day-care facilities within the academic center, and developing policies for stopping or delaying the tenure clock, allowing individuals more time before mandatory decisions.

Several chairs have attempted to adapt faculty schedules to be more hospitable to parents with young children.

When we have meetings that are called in off hours, it's typically the male faculty who can make those meetings. And consequently wind up getting greater administrative responsibilities. . . . If I want to have substantial representation of women, I have to hold those meetings during the regular work day. (Man)

Other chairs were less amenable to restructuring the routine, citing other constraints on scheduling: "It's not driven because we're trying to keep women out or something; it's driven by the patient load, it's driven by the clinic schedule, it's driven by all sorts of stuff" (Man). Still others expressed a commitment to surmounting these kinds of logistical complications, as evidenced in the following strategy for lessening the burden of on-call schedules for young mothers working in a coronary care unit.

We have to structure things so that women can meet their unequal [share of parenting responsibility]. . . . When I was chief of cardiology we would organize it so that the young women didn't have the night call that we did. I used to do what I called mommy patrol. I wanted some of our young women to attend in the CCU because they were so good. But I didn't think it was right for them to have to be called back in two and three times during the night. So I would take the night call. Let them start in the morning at eight, and six o'clock they'd sign out to me, like in an ER. And the understanding was that when their kids were older, they've got to do that for the next group. (Man)

For several respondents, the availability of day-care centers at medical schools remains an unmet need. Their comments reflected considerable frustration at the intransigence of their institutions in this regard, despite ongoing local studies of the need for these services.

Thirty-two of the 36 respondents favored the establishment of an explicit policy permitting them to extend the probationary period prior to tenure decisions for faculty who have heavy family responsibilities, in effect stopping the tenure clock for periods commensurate with those responsibilities. Such policies would permit faculty with young children to work part-time and return to full-time status later without being penalized. Of the 33 chairs at tenure-granting institutions, 13 reported that they have this authority and another seven, while not explicitly authorized, have used informal means to delay tenure decisions under these circumstances. Several chairs believed that such policies should be extended to men as well as to women.

Some respondents described measures they took to circumvent tenure timetables.

I do it a different way; frankly it's just a local detail. I always recruit people either into the clinical track or the research track, give them time to get together all the credentials they need to move up in tenure and then we re-advertise the position and rehire them and then move them into a tenure track. So I build the delay in. (Man)

Others used the clinical track as an alternative to tenure for faculty whose family responsibilities did not allow them sufficient time and energy to build records of performance that would earn tenure. The pitfalls of relegating women to a clinical track, however, were pointed out by a chair in his appeal to change tenure policies.

Get rid of the clock that says that in six to eight years you have to have 50 articles, national recognition and be put up for associate professor with tenure, or you have two choices. You're either fired, or you go on the clinical track. Well, if you go on the clinical track, you're doomed not to be the chair in 99% of the schools in this country. Now, there are a few schools that have non-tenured people as chairs. I don't know very many of them. And so we're dooming them right from the start. (Man)

Advocating a more radical change in faculty routines, one respondent urged consideration of part-time tenure-track positions for people who split their time between career and family.

Adapt the role of chair. While most respondents regarded the job of chair to be extremely demanding and time-consuming, some questioned whether the

role might be restructured to better accommodate family life.

> It's in the role of deans and chancellors to say look, let's experiment. We've got a red-hot candidate here, somebody we want, but she wants to go home at three o'clock every day. What can we do to help her? And let's try it. (Man)

Others believed that women aspiring to leadership often make unwarranted assumptions about the requirements of the job: "I think that it's possible to have a life and to be a department chair. And so I try to provide role modeling like that and some balance. I try to help women to see that they can do it, and they don't have to do it exactly the same way men do it" (Woman).

Sexism: Consequences for Advancement of Women

The nature and scope of sexism perceived by chairs emerged from their accounts of sexist behavior that they had witnessed over the preceding year (see Table 3). Instances of inappropriate sexual behavior or talk were most common, ranging from flirtation, to making sexual advances, to pressuring women to participate in sexual relationships. Provocative comments were most frequently cited.

> [While talking with the dean at a meeting] this guy comes over who I report to for the hospital, a surgeon. And he leans over and he looks at me and he puts his arm around me and he says, "_____ you're looking so sexy these days, how does your husband let you out of the house." This is in front of the dean, okay? . . . After the guy left, the dean asked, "Is this what the women are complaining about, about the surgeons?" And it was like he suddenly got it. (Woman)

Lack of recognition of women was cited as another prominent behavior. Recounting an incident she had experienced at the specialty meeting where the interview was conducted, one respondent reflected on the attitudes underlying such behavior.

Table 3

Types of Sexist Behavior toward Women Faculty Witnessed by Department Chairs

Behavior Witnessed	No. of Chairs*
Inappropriate sexual behavior or talk	13
Demeaning jokes	6
Disrespect; lack of recognition	9
Denial of access to important experiences	3
Discrimination in decision making	9

*The chairs were not asked whether they had observed each category of behavior. These numbers are tabulations of volunteered responses. As such, they are underestimates of the true frequencies.

> I wanted to ask a question after one of the speakers, and I stood up and the speaker didn't even look at me until I was the last person standing. And a couple of the men asked questions and they didn't even stand at the microphone. . . . I think that men don't see a woman like they see a man. There's an unconscious prejudice. . . . The hardest part is for men to really see that they're prejudiced against women. It's like the *Invisible Man*, the Ralph Ellison [novel]. I identify with minority men because I know what it's like for you to be in a room and you want to say something, and nobody looks at you. (Woman)

Other respondents confirmed the prevalence of a basic lack of respect in routine interactions among faculty.

> Women are never taken as seriously. And that's an issue. I mean, you go to meetings and you present ideas, and it gets dropped on the table. Nobody says anything. And it's like it's ignored. But six months later a male colleague could present the exact thing and wow, it's the greatest idea. . . . There is a lot of that sense of you're not really a major player. And that has been a sense that I have felt all along my career at every step. (Woman)

The enduring impact of such an inhospitable environment on the career outlooks of women was characterized by another chair:

> Academic medicine is still a macho male environment. . . . Men are probably more likely to accept it and grit their teeth and go through it. Women will really rebel against it. And so what they tend to do, I've seen in academic medicine, as well as in many other fields in academics, is they'll move to the edges of the periphery of their fields. They don't have to do the hard-core, head-on-head competition with the men. (Woman)

Several chairs noted a slightly more veiled manifestation of sexism: the inclination to question a woman's dedication to the enterprise. For example, it may be assumed that a decision to have a child implies a lesser commitment to the academic community.

Women continue to be selectively deprived of experiences central to advancement in the field, according to several respondents. The invisibility referred to earlier appears to contribute, either deliberately or unconsciously, to their exclusion.

> I was in the room when the dean said I'm going to appoint these six men to this committee, and I said, "gee, those are the six men that are on all your . . . committees." Have you ever thought about putting a woman on the committee?" And he said "oh, gee, I didn't notice that there wasn't a woman on this committee." (Man)

There were also numerous reports of subtle instances where important business was conducted in settings in which men congregated but women were conspicuously absent, such as in locker

rooms, on squash courts, or at exclusive clubs.

The respondents indicated that the tendency to replicate traditional gender roles in the tasks that women take on or are allotted within the academy further limited their options. These assignments are often essential to a department, but they do not enhance career development.

> She was doing the traditional womanly thing of being on every single committee that anybody asked her to be on, writing all kinds of things, doing what I call really secretarial work for the former chairman, like helping to get out the annual report, etc., etc. And she wasn't on the tenure track. (Woman)

Finally, chairs reported cases in which gender bias played a significant role in decisions critical to career advancement. In identifying candidates, women may be invited to interview as a token response by search committees aimed at enlarging the pool without changing appointment outcomes.

> They [search committee members] know they have to have a woman on the short list, so you get a qualified woman on the short list, and then you have three candidates and, you know, the person you pick is the person you would feel comfortable playing golf with because that's your culture. And so there's an extra step you have to go to be comfortable with a woman who . . . is not the usual person sitting around the boardroom table. (Woman)

In interviewing candidates, the chairs reported instances in which women were asked questions by search committee members that signaled that they were not being taken seriously as candidates.

> I was a candidate for that job (chair) and met with the selection committee . . . and it was full of men. . . . About halfway through my interview one said pointedly, "Are you really sure this is right for your life? Is this really the right thing for you?" I was absolutely flabbergasted. (Woman)

In evaluating candidates, the chairs described how bias contributed to different responses to the same behaviors depending upon whether they are exhibited by women or men. According to several chairs, those behaviors esteemed in men are often denigrated in women.

> If a woman is assertive the way many men are, they're looked at as being out of order. You know, it's simply discrimination. They can say the same thing in the same way, but if it comes out of the lips of a woman it's viewed differently by at least male administrators. The fact that most leaders in academic medicine are men perpetuates that. (Man)

In recruitment decisions, another respondent recounted the machinations that search committees employed to avoid appointing a woman.

> They were interviewing for a [division head] where I was. [They] brought in this guy, and I looked at him and I said, "I do more work than he does, I've got grants, . . . and the guy was just very condescending." So I figured I'm going to apply. And I did. And the department chair never acknowledged it, even though I handed him the application. They shut the search down. And then, in good old boy fashion, hired a man about a year later who did not have the qualifications, and I hadn't even been acknowledged. And I said something to the chair. And he said that he didn't think I was ready. . . . So I said I'll show you how damn ready I am, and I went to the [job listings] and I applied for every chair that was advertised that month. And I got three offers. (Woman)

Patterns of sexism also pose obstacles to the successful performance of leadership functions by women once they are on the job. The reluctance of men to be supervised by women was cited by several chairs. Other comments highlighted the need for women to make conscious efforts to transcend gender stereotypes in negotiating the terms of their jobs.

> The expectation because we're women is that we're gong to do more for ourselves. And, and I know this sounds harsh, but I think the men are coddled more. You wouldn't see a male chair without all his little admin support rallied around him to do for him. And we don't have that. . . . We don't demand it. We don't expect it. (Woman)

The chairs were asked what they did about sexist behavior they witnessed at their institutions. The strategies they reported varied widely in scope and purpose. Some strategies targeted individuals while others addressed groups; some emphasized remediation while others focused on redress; some aimed at prevention while others relied upon deterrence.

Advocating a preventive approach, one chair reported participating in a retreat for all incoming medical students that was designed to sensitize them to cultural and gender-related issues and alert them to expectations of how they should deal with unacceptable behaviors. Another chair subscribed to an activist approach, appointing women to prominent positions as a mechanism for bringing counterproductive attitudes to the surface and forcing colleagues to confront them: "I think it's very, very important to get capable women in positions where they make other people in the organization uncomfortable about their sexism" (Man). Several respondents emphasized the importance of their own behaviors as a way of setting expectations for their colleagues and students. When serving as role models, these respondents aimed to instill in department members an openness to discussing potentially offensive behavior.

I try to be as clear as possible about what the expectations are for behavior within the department. And I ask us all, I ask everybody to call me to task when they see, feel, experience something that feels disrespectful. And I expect the same in return. I expect people to listen. (Man)

Other chairs reported that they relied upon committees and school-wide programs to bring issues to the surface and stimulate constructive responses.

One of the things that resulted from this incident in which a woman thought that she was subjected to a sexist evaluation was the formation of a committee in my department. . . . It's intended to be proactive in dealing with women and minorities' affairs and concerns and potential problems. And from the dean's office there have been many programs given about sexual harassment in the workplace, and faculty and employees have been required to attend these. [Do you think those are effective?] I think probably just the fact that there's a program and people talk about it makes a difference. Just the fact that a woman will perceive a joke in a different way as a man, I guess everybody knows that now. But in the beginning, that came as news. (Man)

The respondents emphasized that, as a prelude to taking action, episodes of sexist behavior must be identified and explicitly labeled as unacceptable. Yet, one chair, who offered several examples in which she had taken the initiative and spoken out, also acknowledged that there were circumstances in which she felt the personal costs of doing so outweighed the potential benefits:

In a couple of examples it was at very senior levels where it was not in my interest to point it out. So I didn't. And that happens too. So, no matter how exalted a position you have, there's still these environments where you notice things that are very clear, and somebody else doesn't notice it or doesn't want to. At a level where I could do something about it, I always try to raise my voice for those concerns. And I have been in a number of settings, both in the appointments and promotions process and in recruitment discussions or in other sorts of senior management discussions, both here and also in national organizations, where real blatant sexism and unconscious sexism comes up. And I usually will point that out. . . . I think it is important for people to speak up when they see those things. (Woman)

Once they have identified unacceptable behaviors, some chairs engaged personally in counseling the colleagues and students who have displayed them.

I've witnessed one pattern of behavior among a colleague who is virtually unaware of it. Let's just call him a very senior faculty member up for a very senior position. A lot of his bravado and patter—it tends to be a little bit sexually oriented—with jokes and comments. I know him well, I know his wife well and I have no reason to think whatsoever that this is anything but some immaturity and lack of sensitivity. But two days ago I sat down with him and said if you rally want this job, and he's my level here, you're not going to get it unless you're aware of this. And his first hour was protestations that it didn't exist. But eventually he acknowledged and addressed it. (Man)

The last recourse the chairs used to address sexism was to terminate the employment of a faculty member or dismiss a student. Only a small number of respondents, three of the 36, reported that they had been involved in such an action over the preceding year or so.

Adequacy of Mentors: Do Women Have Distinctive Needs?

I think the most important thing is that women have to feel that they're taken seriously, and the mentoring has to start very early, and women have to know, I think, first of all, how to be at the table, how to present, how to get to national meetings, how to say no appropriately. There are lots of things that I learned by trial and error that would have been nice if I had had somebody to clue me in. (Woman)

Prospects for advancement in academic medicine are enhanced significantly by the guardianship of an effective mentor. The respondents consistently regarded success in developing the careers of junior faculty as a hallmark of an effective chair. Still, finding such an advisor is a gift for any junior faculty member, and, according to most chairs, women in academic medicine have special needs and confront unique challenges in this area. The respondents indicated that mentors can play a key role in addressing several of the barriers to advancement mentioned earlier in this report: the constraints of traditional gender roles, the byproducts of early socialization patterns, the cumulative effects of sexism and bias, and the scarcity of senior role models in academic medicine (see Table 4).

These chairs commonly felt that mentors could address issues arising from traditional gender roles.

Mentoring is helpful in alleviating the sense of guilt that goes along with the sense of abandonment of family. . . . It's important for women to find the really successful physician or scientist who figured out how to balance those things, [someone] a little bit older [whose] kids have done well. That's important for people to see. (Man)

One chair enlisted the commitment of his women faculty to perform this role as a quid pro quo for his having served as their mentor for those dimensions that will be critical if they are to become chairs.

According to several respondents, mentors have a responsibility to advise young women faculty about the liabilities of taking on tasks that are more associated with staff than with leadership

Table 4

Perspectives of Chairs on the Relevance of Mentoring to Addressing Barriers to Women's Advancement to Leadership Positions in Academic Medicine

Barrier to Advancement	Relevance of Mentoring
Constraints of traditional gender roles	Foster acknowledgment of the difficulties and provide a role model demonstrating that they can be overcome Offer specific strategies for successfully balancing family and career commitments
Adverse byproducts of early socialization	Advise on taking on responsibilities more in accord with leadership than support-staff roles Insulate from the pressures to accept less-rewarded roles
Sexism and bias	Provide support in confronting and surmounting the repercussions of such behavior Assure that women have access to those experiences essential to advancing in the profession
Lack of role models	Encourage women to look beyond their institutions to locate role models in the national arena

positions and to insulate them from pressures to accept these tasks.

> A mentor has to be somebody who says no for you. And we talk about women and minorities, you know, they get asked to do every crappy little job and pseudo-leadership positions. . . . And some of those things people should do. It would help them develop a high profile locally. But someone has to tell you which of those things are worth your time and which are not. (Man)

Differing access to opportunities, often a function of sexism and bias, extends to the availability of mentorship experiences for women.

> It's clear that mentorship is an issue, that . . . women do not have the same degree of mentorship as some of the men have. They've not had the same access to some of the organizational fraternities. You know, there's men's clubs. (Man)

Even in the presence of women role models, the pressures against transcending traditional gender patterns are significant.

> I can't convince enough women to take those leadership positions. I have trouble doing it. . . . Once you make it, you're not necessarily a good role model because they look at you, when there are so few of you, they say "Well, you can do it. But, you know, I can't really do that." (Woman)

The chairs' acknowledgment of the importance of women role models was accompanied by concerns about their scarcity. With an awareness of his circular logic, one chair argued, nonetheless, that creation of women role models constitutes yet another reason for appointing qualified women to leadership positions:

> I really do want to emphasize women role models. I would hope that institutions would have the wisdom to put women, very powerful women, in very visible positions. I think once you do that, it's like a magnet. And I think it really seeds an institution. (Man)

Two issues that surfaced in the chairs' views on assuring a productive match between mentor and protégée were: (1) Is it important that women serve as mentors for their women colleagues, given the distinctive needs of women? (2) If same-gender professional partnerships are important, how can their benefits be achieved in light of the scarcity of women in leadership positions who are available to serve as mentors?

Their responses indicated that most chairs believed that it would be difficult for men mentors to understand, much less identify with, the distinctive pressures that confront women faculty members.

> Most of the senior men that would otherwise mentor them in the lab or in the clinical research arenas are not going to be able to talk to them about the other stuff because they have wives who do the laundry and take care of all the other things, and they're clueless. (Woman)

Several of the men chairs who believed that women mentors were optimal also acknowledged that, in many cases, they themselves were likely to be the only mentors available. Therefore, they felt a responsibility to do the best they could to be helpful. Further, limiting women faculty to women mentors, according to one respondent, might replicate the differential access to opportunities that has hampered advancement of women in so many ways.

> In some ways, actually, it might be better [to have men as mentors for women] because then you're not going with an assumption that there's something special or something wrong with me, or I'm missing something by being a woman. You know, if men are your mentors then they're not even going to think about that. They're going to tell you how they did it, what they did, and maybe actually that would be better for women, to hear on some level from somebody who doesn't assume that there's a barrier. (Woman)

Other chairs believed in the importance of promoting gender-blind mentoring, not only to assure access to a variety of perspectives but also to allow women to benefit from any mentors who are particularly effective.

A few respondents called attention to the intensity of mentoring relationships and resulting difficulties that might arise. In particular, the potential for misunderstandings may discourage the development of mixed-gender mentorships.

> [Men mentors] wouldn't think anything at all about working till three o'clock in the morning, you know, with a male student on something. But you might think twice about it if you're by yourself with an attractive young woman. I mean, I don't know how strong that is, but I think that a lot of faculty are very nervous about that. (Man)

A climate of distrust, spilling over from attitudes within the broader society, may make it difficult for men to give women advice on sensitive topics.

Emphasizing the breadth of skills to be mastered and acknowledging the limits in resources, several respondents favored segmenting the roles and responsibilities of mentors and assigning responsibility for junior faculty to several mentors chosen for their particular strengths and acuity. In addition, the limited supply of women mentors necessitates a search for other options, particularly if, as one respondent indicated, the singular focus required of women who succeed may preclude them from serving as mentors as they advance.

> What we do is we concentrate on ourselves because it's such a struggle. . . . We sort of forget about other people until we've arrived. I know I did. I'm not sure that I had the energy to be very specific about helping other women while I was still struggling to establish myself. (Woman)

Institutional solutions may be launched at individual schools, or they may be implemented more broadly through national organizations. A local effort reported by one chair was the establishment of an association of women faculty at the school to address various advising needs of junior faculty rather than relying exclusively upon individuals for this role.

A different approach advocated by some chairs was to create visiting faculty positions for the purpose of bringing accomplished women to the campus even for limited periods of time. Ultimately, as one respondent observed, recruiting and promoting more women will yield more women role models as well as mentors, "If you don't have role models, maybe it's worth trying to make them. And to make them means [appointing women]" (Man)

Discussion

The chairs we interviewed painted a broad tableau of factors constraining women's advancement to leadership positions in academic medicine, and they identified three sources of barriers: historical developments (e.g., shortage of women in the pipeline), broad social forces (e.g., gender roles and socialization patterns affecting women's status), and the expression of these forces in the medical environment (e.g., sexism in recruitment and promotion practices, a shortage of effective mentors for women). Collectively, the respondents embraced a wide spectrum of strategies for addressing these barriers (see Table 5).

Any assessment of the viability of their proposals must take into account the magnitude of the problems confronting women academics and the persistence of these problems over the years. Criteria for effective interventions should include: the probability of improving the options for a large proportion of women, the likelihood of having an enduring impact, and the potential for enhancing the quality of work life for all faculty who aspire to leadership.

Table 5 classifies the chairs' intervention strategies according to whether they target individual change through one-on-one approaches or institutional change through departmental or schoolwide policies. To address the impact of gender roles, individual measures entail counseling, advising, and serving as role models, whereas institutional interventions involve changes in faculty schedules and on-call arrangements, part-time appointments, and modification of tenure and promotion policies. Chairs can address sexism individually by demonstrating professional behavior, appointing excellent role models to strategic positions or committees, confronting instances of bias when they are encountered, personally counseling colleagues and students, and demoting or dismissing unprofessional individuals when necessary. Or they can address sexism with institutional interventions such as programs to educate faculty and students about standards of conduct and mechanisms for responding to unacceptable behavior. In providing mentors for women, chairs can address this need individually by educating men to be more helpful in these roles, appointing more women to senior positions and visiting professorships, and encouraging women to identify multiple mentors, while broader institutional interventions could include establishing and funding associations of women faculty, extending mentoring networks to nonmedical departments within the university, and participating in regional and national networks.

These different levels of intervention offer distinctive outcomes. Changes at the departmental and school levels generally acknowledge flaws in our social institutions and address them with policies that are more harmonious to growth and development among the faculty-at-large. Individual interventions often seek to adapt individual fac-

Table 5

Individual and Institutional Interventions Recommended by Chairs to Address Barriers Women Face in Advancement to Leadership Roles in Academic Medicine

Barrier	Focus of Intervention
Constraints of traditional gender roles • Incompatibility of academic demands with family commitments • Replication of traditional roles in the assignments earmarked for women • Constraints on career-related choices	Individual • Counsel women on options for structuring home life to accommodate activities essential to advancement • Serve as a role model demonstrating possibility of successfully balancing family and career • Advise women on avoiding an inequitable share of assignments that are not rewarded in the tenure and promotion process Institution • Schedule meetings at times more workable for faculty having heavy family responsibilities • Devise on-call schedules that minimize nighttime commitments for parents with young children • Create part-time tenure-track appointments • Establish policies for delaying tenure decisions for faculty with heavy family responsibilities • Appoint such faculty to clinical or other tracks having less demanding requirements for tenure
Manifestations of sexism • Inappropriate sexual behavior • Differential access to career-promoting experiences • Discimination in tenure and promotion decisions • Lack of serious attention to female candidates in search processes • Application of differential standards in judging achievements of men and women • Pervasive disrespect of women and inability to acknowledge their contributions	Individual • Serve as a role model, setting expectations for colleagues and students • Publicly acknowledge one's own blind spots as they occur so as to promote openness to discussing them • Speak up when confronted with offensive behaviors • Personally counsel colleagues and students who display unacceptable behaviors • Appoint women to prominent positions to force colleagues to confront their suboptimal attitudes • Appoint to search committees individuals who can be relied upon to take female candidates seriously • Initiate proceedings to terminate employment or dismiss a student for inappropriate behavior Institution • Assure that important departmental business is not conducted in settings in which women generally are not present (e.g., locker rooms, squash courts) • Establish workshops and other programs designed to sensitize colleagues and students to gender-related issues and set standards of acceptable and unacceptable behaviors • Incorporate attention to such matters in student orientation sessions • Set up formal and informal mechanisms for identifying and responding to unacceptable behaviors
Scarcity of effective mentors • Distinctive needs of women • Shortage of female leaders to serve as mentors	Individual • Encourage men to rise to the occasion and do their best to be helpful • Appoint more women to senior positions • Use visiting professorships to increase the presence of female role models • Encourage women to rely upon multiple mentors, some addressing distinctive gender-related needs and others focusing on more traditional functions Institution • Establish associations of female faculty to foster more efficient use of existing mentoring resources • Recruit mentors from non-medical departments within the university that have larger numbers of female senior faculty • Participate in regional and national networks designed to link mentors with junior faculty within a given field

ulty members and their personal lives to better suit them to academic routines. These strategies generally preserve current institutional arrangements, even those that may be destructive to the personal lives of all faculty. The different outcomes associated with these two types of strategies are exemplified in attempts to address conflicts between traditional gender roles and advancement to leadership. Proposals for altering family dynamics alone (e.g., having children early and acquiring more help at home) do not require medical institutions to change. Policies for adding flexibility to tenure policies and faculty appointments, however, have the potential to achieve a more pervasive, long-term impact. To succeed, women who are currently in leadership positions had to prevail in an environment that was hostile to their aspirations; in general, they were not beneficiaries of institutional reform and often had to adjust to inhospitable circumstances in order to advance. Such experiences may lead them to emphasize individual rather than institutional strategies for change. Nevertheless, we found that several of the respondents in this study advocated both types of measures. For long-term change, individual measures are necessary but not sufficient; changes in institutional practices have a greater likelihood of outliving the incumbency of individuals and therefore hold greater promise.

This study was confined to the analysis of in-depth interviews with 36 respondents, which was both a limitation and a strength of the research. The method we used did not permit testing of hypotheses or estimating the overall distribution of a specific belief or trait in the population. The richness of the data, however, afforded a degree of validity that cannot be attained by other approaches, and the systematic composition of the sample yielded thoughtful consideration of strategies that have relevance to a broad range of settings. As we previously acknowledged, the perspectives of the respondents may be skewed by the fact that they have succeeded; their views may not have relevance to broad sectors of faculty who are currently confronting the process of promotion review or recruitment. Nevertheless, their views are still worthy of study, because chairs have power to influence faculty recruitment and promotion and to set the agenda for future policies affecting the advancement of women.

In sum, while the intensity of the respondents' concerns about the scarcity of women in leadership positions varied, virtually all of those interviewed acknowledged the existence of barriers. Their recommendations for eliminating these barriers involved both individual and institutional actions to achieve short-term as well as enduring impacts. However, given the ubiquitous nature of the barriers and their seeming intransigence, it would appear that, in the absence of significant changes at the institutional level, inequities in the status of men and women in medicine will persist, and women will continue to be underrepresented among the leadership in academic medicine.

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