

Stories From Early-Career Women Physicians Who Have Left Academic Medicine: A Qualitative Study at a Single Institution

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Abstract

Purpose

The number of women in academic medicine has steadily increased, although gender parity still does not exist and women leave academics at somewhat higher rates than men. The authors investigated the reasons why women leave careers in academic medicine.

Method

Semistructured, one-on-one interviews were conducted in 2007–2008 with 20 women physicians who had left a single academic institution to explore their reasons for opting out of academic careers. Data analysis was iterative, and

an editing analysis style was used to derive themes.

Results

A lack of role models for combining career and family responsibilities, frustrations with research (funding difficulties, poor mentorship, competition), work–life balance, and the institutional environment (described as noncollaborative and biased in favor of male faculty) emerged as key factors associated with a decision to leave academic medicine for respondents. Faced with these challenges, respondents reevaluated their priorities and concluded that a discrepancy existed between their

own and institutional priorities. Many respondents expressed divergent views with the institutional norms on how to measure success and, as a consequence, felt that they were undervalued at work.

Conclusions

Participants report a disconnection between their own priorities and those of the dominant culture in academic medicine. Efforts to retain women faculty in academic medicine may include exploring the aspects of an academic career that they value most and providing support and recognition accordingly.

The number of women entering medical school has steadily increased since the mid-1970s, when women comprised less than 10% of medical graduates. In 2010, approximately 50% of matriculating medical students were women.¹ Although the number of

women in academic medicine has also increased over this time, gender parity does not exist at U.S. medical schools, where women make up only 35% of all faculty. Data suggest that although women may be more likely than men to pursue academic careers, long-term trends demonstrate that they leave academia at somewhat higher rates than men.^{2–4} The professional experiences that women have in academic medicine may explain this trend. Prior studies have demonstrated considerable inequities between men and women in terms of promotion rates, compensation, leadership positions, female first author publications in top medical journals, and receipt of funding.^{3,5–8}

A variety of factors have been proposed to explain these findings, including lack of effective mentoring, less support than men receive for research activities and career development, and gender bias.^{5,9–12} Much has also been written about the culture and organizational structure of academic medicine, which traditionally has not supported work–life flexibility.^{10,13} For example, female faculty with children report more obstacles to career advancement than their male counterparts or female faculty who do

not have children.¹⁴ The lack of on-site and emergency child care options, the tendency for meetings outside of routine work hours, and the absence of a part-time promotion track have been shown to negatively impact the satisfaction and retention of women faculty.¹⁵ Finally, features of the institutional culture which have been described as hierarchical and competitive, and which may undervalue humanistic, social, and educational missions, may have a negative impact on women faculty disproportionate to that on men.^{16–19}

When women leave academic medicine, the potential repercussions are widespread. Women faculty offer unique and enriching qualities through patient care, research, teaching, and leadership roles and have helped to enhance the focus on women's health in particular. Retaining women in academic medicine promotes diversity and gender parity and ensures the presence of female faculty role models.^{5,20,21} From an economic perspective, the loss of each highly trained faculty person is a financial burden not only for medical centers but also at a national level in terms of investment in training of women physicians.

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Although many faculty experience challenges working in academic medicine and may consider leaving during their careers, women may be particularly vulnerable. Understanding the context and details of why women leave will help to address the problem. The purpose of this study was therefore to deepen scholars' understanding of the perspectives of women physicians who have left academic medicine by listening to and examining their stories.

Method

Study design and sample

This was a qualitative study involving one-on-one, semistructured interviews with women physicians who had left academic medicine. We targeted female junior faculty who had left a single academic health center (AHC), the Johns Hopkins University School of Medicine (JHUSOM), for nonacademic positions. JHUSOM is a large, urban, research-intensive AHC where each of us has, or has had, professional ties. We focused on women faculty at the instructor and assistant professor ranks because this group represents the pipeline for advancing in academia. To identify potential participants, we used a purposive sampling strategy that started with obtaining a list of female faculty who had left the institution before reaching the rank of associate professor between 1992 and 2007 from the office of the vice dean for faculty. This list did not specify which departing faculty had left the institution for nonacademic positions. Therefore, to verify and augment this list we contacted one to two faculty in each department and asked them to provide the names of women physicians they were aware of who had left the institution for nonacademic positions. We then contacted these women by e-mail to explain the study and ask them to participate. We used network and "snowball" sampling wherein colleagues and early participants were asked to identify and refer other potential participants.²² Sampling was discontinued when thematic saturation was achieved. Compensation was not provided. A JHUSOM institutional review board approved the study.

Data collection

We developed an interview guide using the current literature on women

physicians' experiences in academia and discussion among the study team.^{3,6,7,9,10,12,23} One author (F.L.) developed a working interview guide based on information gleaned from the literature and from earlier study group discussions among all authors about the project. This guide was circulated for review among the study group, who then met to discuss the guide. We did this multiple times until we were satisfied with the final guide. We had a variety of considerations in choosing the final interview questions, including time limitations and clarity of presentation. The guide was not formally piloted outside our group. The final interview questions (List 1) focused on participants' reasons for initially choosing a career in academic medicine, if and how their expectations differed from their experiences, how they measured "success" for themselves versus how success is measured in academia, the details of why they left, and, finally, whether they felt the institution could have done anything that may have persuaded them to stay. One investigator (F.L.) conducted semistructured interviews based on this guide from July 2007 to June 2008. All interviews were

List 1

Interview Guide for Semi-Structured Interviews With 20 Women Physicians Who Had Departed Academic Medicine*

- Please tell about the influences or motivations that led you to choose an academic career.
- Tell the story of why you chose to leave the academic track.
- Was your experience in academic medicine different from what you had envisioned?
- What does it mean to you to be successful?
- Would you ever consider re-entering academia? What factors would be necessary to motivate you to do so?
- Is there anything that the institution/division could have done that would have helped you to stay in academics?
- As you reflect on your decision to leave academia, is there anything else that you would like to say, any other thoughts at all?

* One of the authors conducted semi-structured, one-on-one interviews based on this list from July 2007 to June 2008. All those interviewed had left a single academic institution. All interviews were audio-taped and transcribed verbatim. The authors also collected demographic data, but to ensure the anonymity of participants, they collected only limited data of this type.

audiotaped and transcribed verbatim. We also collected demographic data on marital status, number of children, number of years in academia, academic rank at the time of their departure, number of years since departing, and department in which they had worked. To ensure the anonymity of participants, we collected only limited demographic data. Written consent was obtained for in-person interviews, and verbal consent was obtained for telephone interviews.

Data analysis

The first eight transcripts were used to develop the initial categories for data analysis. We began data analysis using an "editing analysis style." With this method, "the researcher searches for meaningful segments of text that both stand on their own and are related to the purpose of the study."²⁴ Each member of the study group was responsible for reading two to four of the initial eight transcripts. We then individually extracted categories and subcategories of themes based on the initial transcripts. The study group then met to review our findings and negotiate around a provisional set of categories. This was accomplished in two iterations. The provisional template was used by members of the study group to individually read a subset of the remaining transcripts as they were collected. The transcripts were coded using categories developed in the provisional template, and new categories were added as necessary. At this stage, two researchers (F.L. and R.B.L.) read all of the transcripts. We met several times to make additions and revisions to the template as needed from reading the remaining transcripts. Finally, we met as a team to organize the categories into themes for presentation.

To further validate our conclusions, we sent the results section of the manuscript to five of the study participants for feedback, who confirmed our findings.

Results

Participant characteristics

Twenty interviews were conducted, each lasting about 60 minutes. The interviews were structured by the interview guide, although the interviewer was flexible and allowed informants' stories to be revealed naturally. In all but one case, the

interviewer and respondent were not acquainted before the interview. Nineteen of the study participants were married and had one or more children at the time of their interview. Participating women had been on faculty for a mean of 3.3 years (range 1–7 years) and had left within the past 1 to 12 years (mean 3.5 years). Participants had been faculty in internal medicine, pathology, psychiatry, obstetrics–gynecology, and neurology. All participants were junior faculty, with 8 being instructors and 12 assistant professors at the time they left.

Overview of qualitative analysis

We present our findings in two parts. First the factors associated with leaving academic medicine are described. This is followed by presentation of an explanatory model for understanding how these factors influenced the ultimate decision to leave.

Factors associated with leaving academic medicine

Respondents shared rich stories about why they had left academia. The following themes emerged: (1) lack of role models for women in academic medicine, (2) frustrations with research, (3) work–life balance, and (4) the institutional environment. We provide additional details for each theme and representative quotes below.

Lack of perceived positive role models for women in academic medicine. The lack of perceived positive women role models in academia was a key theme for respondents. Comments focused specifically on the lack of role models for combining an academic career with family responsibilities. Respondents identified potential role models (other women with families) but rejected them as not having similar motivations or priorities.

One respondent's comments indicate her struggle to find positive role models during her training:

I had an advisor assigned to me who was a woman who had grown children.... She was an incredibly intense person who did not relate at all to the need to get home before five, so I can't say she was particularly a role model. She didn't identify with my priorities.

In the following story, another respondent was very committed to

academic medicine at the beginning of her career and on a track for success. When she entered academics, she believed that the only way she could be successful as a researcher was to not have children and devote all of her time to her work. From her perspective, there were no women who were successfully managing both work and family:

I realized later that I probably did want to have kids, and I just didn't see an easy way to do it in the academic world; there were really no good role models in my department.

This participant went on to say how she would define successful role models:

Other women who had children that weren't insane. There were very few of them. The other ones had one or two children, and were obviously distracted and really kind of running on thin air or feeling very torn or were I felt not necessarily great moms, even if they were doing extremely well academically.

Frustrations with research. Many respondents described a sense of frustration with the research enterprise that focused around the difficulty of obtaining funding to secure protected time, poor or absent mentoring, and competition for grants and projects.

This respondent was initially drawn to academia's tripartite mission that she believed would lead to an intellectually stimulating and collegial environment. When commenting on her reasons for leaving, she stated:

I was very frustrated with the research process and it seemed to be all about the research. I thought getting grants was ... it was just really hard. I felt like there was not a lot of direction, like what am I supposed to be doing to get these grants....

Respondents explained that a lack of mentorship created a sense of dissatisfaction and discouragement with work and was a barrier to initiating a productive research career.

One respondent detailed how her inability to identify a committed mentor made it very challenging for her to channel her research into a successful project and grant application.

I hopped around from person to person ... and I think there were people who had interests that were close to mine but ... I

didn't find the ideal mentor. I couldn't figure out how to put that together....

The following respondent was more advanced in her career and had funding to support her work. However, her mentor was too overextended to help her through key steps in her research that would have advanced her career. She described the following situation:

In terms of mentoring, I had an NIH award ... but my mentor was incredibly busy. He cared, he wanted me to do well, but he just didn't have the time and was overcommitted ... but the lack of support and mentoring was frustrating.

Another respondent did not see how she could compete with other faculty who were predominately focused on research and meet the institution's expectations when she did not want to give up her teaching and clinical roles to devote the majority of her time to research:

I don't think I understood as much about how difficult or hard it can be.... Funding became tighter, and even professors weren't being funded.... And then because of the other two [clinical care and teaching], not giving up the other two, you can't focus only on the one, so your projects are never as good as someone who is only doing the one [research].

Work–life balance. Managing the competing demands of work and home life was a struggle for many respondents. This was a particularly powerful issue for women whose spouse or significant other was also in academic medicine. This respondent, a clinician–investigator, found that the combination of expectations for her clinical and scholarly productivity, her husband's full-time academic position, and lack of workplace flexibility made it impossible for her to feel as if she was staying afloat at work or at home. She had this to say about leaving academia:

I was very stressed out, it was just too much to do. My boss was very nice and fairly supportive of having flexible hours ... but he really kept pushing me to do more and more and more. I needed to publish this; I needed to do this grant; I needed to have this clinic and see these patients. There are only so many hours in a day.

She went on to explain that the suggestions she received around work–life balance, which were meant to help her succeed, did not fit with her values

about work and family. She describes her family's schedule at the time:

My husband and I were both working after our child went to sleep. And then we'd go to sleep at 12:00 and get up at 6:00 and the day would go on, if I had more work, I'd stay up to 2:00 or 3:00 in the morning.... Some people told me, "you should have a full-time nanny that works extended hours."... Then someone told me, "... have a morning shift nanny, then an evening shift nanny," and I thought well, this is CRAZY! I want to raise my child! I don't want to delegate that to someone else.

Another respondent told a story in which she had significant personal obligations related to a family emergency. At that time, she felt there was not adequate flexibility at work for her to easily manage her work-life issues. This event contributed to her ultimate decision to leave the institution:

You know there was not much flexibility ... I was very upset about that. I mean I didn't mind having to work but I think it was just the perception of insensitivity to family issues.

Institutional environment. In general, respondents felt that multiple features of the institutional environment contributed to their dissatisfaction with an academic career. Many respondents described a work culture that they perceived as individualistic and noncollaborative, and possibly biased in favor of men. Leadership styles and decisions also contributed to the perception of a poor work environment for some participants.

This respondent described a workplace that was very individualistic and that provided little career support, especially for junior faculty. It was not her impression that senior faculty did not want to help. Rather, they had to manage their own pressures and, in a very competitive setting, chose to advance their own careers before assisting junior faculty:

There's nobody to help you go up and the competition ... everybody looks out for their own benefits and the professors are busy for themselves.

At the time that this respondent left academic medicine, she felt that the institutional environment was particularly hostile for her as a junior faculty researcher:

Especially with the funding climate the way it is right now. People are cutthroat, losing money right and left and not willing to help each other because there is so little grant money ... everyone is so stressed. It's just a horrible climate.

When thinking about how faculty were able to succeed in academic medicine, some respondents perceived a situation in which men seemed to have an advantage.

If you're placed right and know the right people, you can do really well. So I think it is easier for men because there are just more of them. You know they've been around in academics longer and they just happen to be chairs and division chiefs and things like that.

Another respondent said the following:

There was the old boys' network, where I felt as if the men were being pushed more than the women to do their research, and more opportunities came to the men.

Leadership was critical for many respondents in terms of providing support and validation of their contribution to their division/department and the institution. Individual leadership styles and values created an unwelcoming climate for some respondents and contributed to their decision to leave. Three out of 20 respondents chose to leave at a time of leadership change.

Some respondents expressed sentiments that leadership failed to understand the unique needs of female faculty:

[Other men in the division,] they have wives that could stay home, and take care of everything while they worked, and I think that perhaps because of that ... [the institutional leadership] wanted to be supportive ... trying their best to understand your situation, but they can't, I don't think.

One respondent described her experience with new leadership in the division. Key clinical and administrative roles she had overseen for many years were eliminated following the hiring of the new chair, who did not speak with her individually about a change in her responsibilities. She learned about the decision to eliminate one of her primary roles at a general faculty meeting:

It was just a meeting with everybody else, where it was discussed that we needed to have somebody else as the director. I was at the meeting, and I didn't feel like I could protest about it, or say anything. I

didn't want to. I just felt that at that stage, there were a lot of unknowns for me.

A model for understanding factors for departure: Discrepancy in priorities and feeling undervalued

Whereas many academic faculty (both male and female) experience the difficulties described by these study participants, only a minority choose to leave academic careers. We delved further into our respondents' stories to develop an explanatory model to illustrate how the factors described above contributed to the decision to leave. Faced with the challenges inherent in an academic career, many respondents reexamined their priorities and concluded that a discrepancy existed between their own and institutional priorities. This discrepancy made it very difficult for respondents to feel that they could succeed (by their own or institutional standards) without making considerable career or personal compromises. Many respondents felt devalued at work and described this as the turning point in their decision to leave.

Participants reported that although the institution valued expertise and quality of work, very limited measures of success seemed to be operative. All respondents in our study stated that the institution was focused primarily on the type and amount of grant support and the number of publications they had. Two respondents' comments illustrate this:

You publish, you get grants, you get promoted. That is the definition of success.

Sadly, success in academics is often defined by the length of the CV or list of publications. I think the things that make good doctors, and good teachers, are much more difficult to quantify.

One respondent told about her experience of beginning a career in academic medicine and being committed to the institution's tripartite mission of patient care, teaching, and research and then of her recognition that the culture and leadership did not support all parts of this mission. She describes her reasons for entering academia:

Thinking I could impact medical care via teaching medical students and residents and by doing research and publishing.

After reexamining her own experiences and values, she concluded:

It wasn't that way in terms of trying to teach the way that you thought you would, there wasn't time for that, because you had to do your research, you also had to meet your clinical responsibilities at the same time as making sure that you give good patient care. There are only so many hours in a day.... Ultimately, you couldn't really reach the goals ... but in the end, when you're in academic medicine, there is only one that really matters ... research.

Another respondent, whose view of success at the beginning of her career corresponded with that of her institution, began to reevaluate her priorities around work and family. She left because she felt that the academic culture no longer supported her goals:

So I changed, I don't think it was that I was unrealistic early on.... I think I knew what I was getting into but then what I wanted changed. I think the department was very sad to see me go, but the person that I wanted to become was not the person they would have wanted. I think it worked out well. Certainly it did for me. I'm much happier.

The following respondent talked about her own passion for teaching, how this was not valued in her department, and how this had led other faculty before her to leave:

There were a couple of people who were well known for being champions of education but they also happened to be research powerhouses. They were people who had very little, if any, clinical responsibilities so they sort of divided their time between research and teaching. There wasn't anyone who did just clinical and teaching. There were people who primarily focused on education and that wasn't enough and they left.

She contrasted this to what was valued by the institution and described how this made her career path untenable:

Research above all else and I was not interested in doing research ... aside from educational type research.... So that seemed like a dead end path and I knew that I wouldn't enjoy coming to work every day.

Another respondent cited many factors including personal financial pressures, obligations to care for an elderly parent, lack of mentoring, and the challenges of conducting research in the setting of having high clinical responsibilities as contributing to her decision to leave. Ultimately, however, it was the sense of

not being valued that resulted in her leaving academic medicine:

Being valued for my work. That is the key.... I felt that I wasn't here, when that was lost, I had to leave, because it wasn't working out. I was devalued.

Discussion

In sharing their stories of leaving academic medicine, the women who participated in our study have shed light on themes and factors associated with their departures. For the majority of our respondents, no single factor led to the decision to leave. This highlights the importance of exploring the nuances of these very personal stories to better understand how each issue and the associated context contributed to the decision to leave a career in academia.²⁵

Our findings add to the literature by going beyond a listing of factors associated with women leaving academic medicine. We present an explanatory model that accounts for the complexity of each story but also identifies a common point, wherein respondents have recognized that their priorities for work and their views of success are incompatible with the institution's expectations. The stories shared by our respondents are about women faculty who have struggled with how to succeed and ultimately concluded that they could not remain in academic medicine without compromising their priorities and feeling undervalued.

The importance of priorities or values alignment in academic medicine has been identified as a way to enhance faculty satisfaction and retention as well as the health of AHCs in general.^{26–30} Recent studies have suggested that the culture found at many AHCs discourages collaboration, collegiality, openness, diversity, and meaningful relationships among faculty and that it undervalues their social, clinical, and educational missions.^{16–19} Other studies have suggested that women are more motivated by intrinsic features of work such as collaborating with and helping others and less by extrinsic ones such as monetary rewards and recognition.³¹ It seems only logical, then, that women who felt that their work was undervalued or who found the work environment disagreeable would choose to leave that situation.

How, then, can we ensure among faculty a greater sense that they are valued for their work? This is a question currently on the minds of many key stakeholders in academic medicine.^{28,29}

Recommendations to address this issue include improving relational practices in academic medicine,³² enhancing the intrinsically motivating aspects of work,³³ and providing faculty with career guidance to help them identify meaningful work and structure their roles accordingly.²⁸ To better align institutional expectations with the values of many physician faculty, AHCs could also address the culture of work in academic medicine, which has traditionally rewarded face-time, excessive work hours, and research over its other missions.^{13,34} By openly discussing the causes of the misalignment revealed in this and other studies,^{19,28} institutional leaders and faculty could work together to diminish the breach. Finally, the women in our study described a lack of role models specifically for work–life balance. This may be an area for AHCs to address by promoting family-friendly policies and flexible work options to help women not only remain but thrive in academic careers and become role models for others.³⁵

Leadership played an important role in shaping the experiences of our study participants. Leadership is critical not only for providing material assistance and opportunities but also for creating an environment and culture of transparency and inclusion in which individual faculty feel valued and part of a team. Women faculty may be more vulnerable to negative environmental or cultural factors when hierarchical leadership structures prevail.¹⁷ Leadership models that distribute decision making and access to resources among multiple faculty members may protect faculty against instability during leadership change.³⁶ Finally, training women to negotiate more skillfully, providing them with their own leadership training, and perhaps altering organizational structures to encourage strategic turnover of leaders or sharing of leadership roles may help to increase the number of women in leadership positions and decrease the attrition of women from academic medical careers.^{17,37,38}

Many participants described their experiences in academia as different from what they had expected. This suggests that improvements could be made in ensuring that greater transparency exists with respect to recruitment and job expectations for new hires. Certainly, faculty are responsible for doing their homework about what a career in academic medicine and a particular job will entail. However, leaders who recruit faculty also bear significant responsibility and should start with an assessment of whether or not the candidate is a good fit for the position and then provide very clear parameters for salary, resource support, division of time, and expectations for advancement. Additional support for female faculty may be realized through mentoring efforts that focus predominately on how to navigate an academic career. Many academic institutions, including our own, have made efforts to provide mentors and role models specifically for women to address these issues.^{11,15,39,40} Such efforts often follow a deliberate and open examination of the existing barriers to the progress of women faculty at individual institutions and require the support of leadership.

A limitation of our study is that we collected data from a single AHC with a strong research focus; therefore, our findings may not apply to the experiences of women physicians at other academic institutions. However, JHUSOM is not unique in its rate of women faculty departures, which matches the national average,⁴¹ and recent research supports our conclusions and suggests that many faculty elsewhere, both male and female, experience the same challenges as did the women in our study.^{14–17,19,42}

In exploring the personal stories of women physicians who left academia, we found that, for many, the decision to leave resulted from a recognition that their expectations and views of success in an academic career did not match their institution's, or that they could not achieve success without compromising their priorities. Ultimately, these women described the experience of feeling undervalued as critical in their decision to leave. Hopefully, our findings will inform efforts to address the problem of women leaving academic medicine and

better support women faculty currently in academic careers.

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