

Advancing Women in Leadership Vol. 33, pp. 106-114, 2013 Available online at http://advancingwomen.com/awl/awl_wordpress/ ISSN 1093-7099

Full Length Research Paper

Stepping Stones: Nine Lessons from Women Leaders in Academic Medicine

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Accepted September 9, 2013

Women now make up half of all medical school matriculates; yet few women hold leadership positions in academic health centers. The reasons for this gender gap are complex and have been the subject of much discussion. However, the experiences of women who successfully ascend to positions of senior leadership are rarely examined. It is critical to develop a greater understanding of women's paths to leadership positions in order to inspire and enable more women to seek such opportunities. Using a semi-structured protocol, we interviewed 16 women leaders who were willing to share their career journeys in a public forum. These leaders were asked to share pivotal moments or milestones, referred to as "stepping stones," in their careers. The interviews were taped, transcribed and analysed for significant patterns and consistent themes. Nine themes were identified and included: hold fast to your values; be open to unexpected opportunities; surround yourself with people who believe in you and people you believe in; be assertive in your communication and actions; continually refine your leadership skills; don't take things personally; stay organized; build positive relationships and welcoming environments; and when and if necessary, prove them wrong. The women leaders had strikingly similar lessons to share. This study develops a deeper understanding of the career paths of women in leadership positions, setting the stage for future study as well as encouraging and empowering more women to climb the leadership ladder.

Keywords: women in medicine; academic medicine; leadership development; qualitative research

Introduction

By many accounts, women are making great strides in academic medicine. A major milestone was reached in 2003-2004 when, for the first time in history, women comprised 50% percent of medical school matriculates (Association of American Medical Colleges, 2010). Such strides, however, are not uniform across disciplines and progress is rather mixed among faculty ranks. While growing in number, women are concentrated in the junior faculty ranks and non-tenured positions. Across all of higher education, there are proportionally fewer women at each step in the academic career ladder (National Research Council, 2009; Martinez et al.,

2007), and in many disciplines, there is a strikingly low number of women who enter, remain in, and advance through the ranks to full professor and positions of senior leadership (Burelli, 2008). Among medical schools, for example, in 2009-2010 women comprised 19% of full professors, 13% of department chairs, and 13% of medical school deans (Association of American Medical Colleges, 2010).

The reasons for the gender gap among faculty are multifactorial, and evidence shows that women face cumulative career disadvantages over time. These may include lack of mentoring (Bickel et al., 2002), tokenism and smaller professional networks (Thompson & Sekaquaptewa, 2002), a chilly climate (Rosser, 2004), and inflexible policies for the integration of personal and professional roles (Welch, Wiehe, Palmer-Smith, & Dankoski, 2011). Further, many disadvantages stem from unconscious biases that cause both men and women to underestimate the competence of women and overestimate that of men (Isaac, Lee, & Carnes, 2009; Valian, 1999). This phenomenon plays a tremendous role in academe where peer review, evaluation, and sponsorship are pivotal to advancement (e.g., Trix & Psenka, 2003; Wenneras & Wold, 1997).

Evaluations of competence also have profound implications for obtaining leadership roles and for being perceived as an effective leader. Despite numerous studies that show far more similarities than differences between men's and women's leadership styles (Catalyst Report, 2005), women are often stereotyped as lacking the very qualities associated with effective leadership. For instance, one study of leaders in the corporate sector found that many business leaders maintained a stereotypical view that "women take care," that is, that women leaders are better than men at supporting and rewarding subordinates. In contrast, the stereotypical view of men is that they "take charge," that is, that male leaders are better at behaviors such as delegating and problem solving. In this study, these gender stereotypes were strongest when women worked in predominantly male fields; thus, women in such environments spend considerable effort motivating and negotiating with subordinates to get their buy-in. In such an environment, the demands of leadership may be far more difficult for women than for their male counterparts (Catalyst Report, 2005).

Leadership can indeed come with a personal cost for women, in both the business world and in academic medicine. For example, when department chairs at academic medical centers were interviewed about the continued shortage of women, the following themes emerged: constraints of traditional gender roles, sexism in the environment, and few effective mentors. Women department chairs, in particular, reported that they personally experienced a lack of recognition, resistance from direct reports, and limitations on leadership and decision-making (Bickel et al., 2002).

Yet, despite such challenges, many women do successfully navigate academe, ascend the leadership ladder, and become successful institutional leaders. Multiple metaphors for women's path to leadership have been used including a glass ceiling (Cotter, Hermsen, Ovadia, & Vanneman, 2001), a sticky floor (Shambaugh, 2007), and a labyrinth (Eagly & Carli, 2007). To the junior or mid-career woman faculty member, the path to leadership can appear confusing, complex, and riddled with challenges. Further, although many studies have been conducted regarding gender gaps in career advancement, far fewer studies have been conducted to understand the

experiences of women who do ascend to positions of senior leadership in academic medicine.

In this study, we sought to fill this gap and learn whether women in leadership at our institution had similar experiences to those cited in the literature and to glean lessons about leadership in academic medicine through conducting interviews with women who hold influential leadership positions. In his book on interviewing as a qualitative research method, Seidman wrote, "stories are a way of knowing" (2006, p. 7). By interviewing a number of women about their personal and professional career milestones and analyzing those narratives, our goals were to generate tangible leadership lessons and demystify the path to leadership for current and future generations of women in the academy.

Theoretical Underpinnings

Personal narratives provide an important window into the human experience, and illustrate a clearer picture of the collective identity of groups (Myerhoff & Ruby, 1982; Personal Narratives Group, 1989). Myerhoff and Ruby (1982) contended that storytelling and its interpretation allow researchers to deconstruct and examine the complex boundaries of our relationships and organizations. As illustrated in the literature, these complexities multiply for women in academic medicine. Women's voices and individual experiences provide an important lens through which to view gender within organizations (Personal Narratives Group, 1989). As researchers, we seek to collect women's stories as a way to better understand the ways in which pivotal moments have helped them to make sense of their lives. Further, by asking our participants to explain how they make meaning of these moments, they are encouraged to be reflexive, so that others may benefit from understanding their approaches (Myerhoff & Ruby, 1982).

While scholars sometimes disagree on the specifics of what constitutes a narrative (Sandelowski, 1991), for the purposes of this study, a narrative is defined as a story that included a recounting of events, and an attempt to make meaning out of those events, either for the individual who experienced the events or the collective. According to the Personal Narratives Group (1989), narratives are especially important to understanding the experiences of women. These stories have the potential to illuminate several aspects of gender relations including the construction of identity, the relationship between individual and society, and the power dynamics between men and women.

Methods

Interview Setting and Protocol

Using a snowball sampling technique (Patton, 2002), we identified women leaders at our institution (including department chairs, deans, and high-level administrators) who might be willing to share their career journeys. Between 2008 and 2012, prospective participants were contacted to take part

in 60-minute, public interviews over lunch. The interview series was described to prospective participants and audience members as "a forum where all faculty and students can learn about professional development through hearing the personal career journeys of successful women." The participants were also informed that they would be asked about "significant milestones in their personal and professional lives that have led to career success." The study was approved by our Institutional Review Board, and we received written confirmation from all of the leaders of their willingness to participate in the study.

The interviews were conducted using a semi-structured protocol (Patton, 2002) in which the leaders were asked to tell stories of pivotal moments or "stepping stones" in their career journeys that encouraged their growth or success. More specifically, they were asked to, "describe what this stone represents for you, and how it contributed to you becoming the person that you are." Each leader shared six to eight "stones" or significant narratives. Additional follow-up questions included:

- Did you make any mistakes or wrong turns along the way that you wish you could have avoided? What were they?
- What do you know now that you wish you knew when you were starting out in your career? What advice do you have for women who are early in their professional development?
- What accomplishment do you consider to be the most significant? What are you most proud of? What do you hope to do in the future?

Participants

Sixteen women faculty leaders from the institution participated in the interviews. Twelve participants had MD degrees, three had PhDs, and one had an MBA. The participants represented a variety of disciplines, with pediatrics being the most common. Based on the observations of the research team, three participants were African-American, and 13 participants were White.

Qualitative Analysis

Each interview was taped and transcribed, and the interviewer took notes during the event. Members of the research team read and analyzed the interview transcripts and field notes for significant theme patterns. Each transcript was reviewed individually and in the context of the sample. As often suggested in qualitative analysis (Patton, 2002), an inductive process was used to determine consistent categories across the interviews. Separate elements were placed into larger categories and the research team developed descriptors to represent the sentiment of each section or cluster (Patton, 2002). Researchers then analyzed the relationships among the clusters and developed higher-level categories or themes that drew together several related concepts (Patton, 2002). After returning to the original data, representative examples were identified from the interviews and notes to support the themes discussed.

Results

Nine themes emerged from the qualitative analysis. These included: (1) hold fast to your values; (2) be open to unexpected opportunities; (3) surround yourself with people who believe in you and people you believe in; (4) be assertive in your communications and actions; (5) continually refine your leadership skills; (6) don't take things personally; (7) stay organized; (8) build positive relationships and welcoming environments; and (9) when and if necessary, prove them wrong. Below, each theme is explained and sample quotes are provided.

Hold Fast to Your Values

Virtually all of the women leaders interviewed for this study shared stories that conveyed a deep sense of commitment to their personal values. They knew themselves well and could clearly identify what mattered most in both their personal lives and their careers. For example, one interviewee remarked, "My heart was tugging me toward... medicine. I had dug my heels in before, so I listened to my heart. I joined."

Further, the personal values these women held served as both an anchor and a compass throughout their lives. For example, one participant commented, "All of the work I do focuses on what I truly believe in." Another woman shared:

I think that...sticking to what made me interested was very important. A lot of people get told what to do...but you've got to have something that keeps you up at midnight...If you don't believe in it, you don't have it.

At least half of the participants made comments about the importance of knowing one's values and sticking to what matters. For example, one woman remarked, "It's important to set goals for yourself and be a strong person. Know what you are supposed to do on the inside and remain calm at all times." Another shared:

It is important to find what you love and do it. Forcing yourself into a position or being forced into a position that you don't love or that doesn't fit you [will not work].

Regarding career and family, many of the women spoke about how their values related to their family shaped their priorities. One participant reflected:

Did I miss opportunities [to play with my children]? I'm sure there were times that I was busy or I was cooking dinner. All I can say is you just do your best and you have to let yourself know that you are human. When my kids explain me to people, they... imply that I never had to choose between medicine and them...they never felt like medicine was my first priority....The way they look at it is, they think that I got it all done...I just tried to do it all.

Similarly, another woman shared:

We assume we need to be a perfect mother...we have our expectations...that we should go to everything our kid does. The reality is that most people work and don't have the flexibility that we have and so in fact we can go to a lot more than somebody who has a job where they can't get time off and can't do these things. All of a sudden this light

bulb went off and I thought, 'why am I killing myself trying to be the perfect mom? I'm a good mom. I'm a very good mom.'

In addition to holding their personal values close, the women who participated in the interviews still felt it was critical to be open to opportunity.

Be Open to Unexpected Opportunities

In their stories, participants shared their openness to see opportunities in virtually every situation. Many of the women offered stories of resilience in the face of challenges and learning from making the most of each situation. In looking back, one woman commented:

I'm amazed sometimes how I was able to make a curvy line into a straight one. I learned to develop the life philosophy that you should shoot for the stars. You might end up on the moon, but that's ok. I started reaching for things and didn't always get what I was aiming for. I did a fellowship at the NIH which was definitely not my first choice for what I wanted to go into. However, I found it to be full of exciting opportunities and unlimited resources. Today, looking back, I can see it wasn't a miss. You end up better if you make the most of each opportunity.

The unexpected bumps in the road could have been perceived as obstacles yet the women who participated in the interviews explained how they found ways to convert the bumps to opportunities. One participant remarked:

I found that taking things that I didn't necessarily think I would be interested in actually turned out to be some of the most interesting things that I've done and helped to start building the areas where I have expertise today.

Similarly, another participant shared how she made the most out of a personal hardship:

Almost days after my baby was born, my husband was deployed. He was gone for the first year of my child's life; I was alone with no family doing this dissertation. But I think there is no better training for being a faculty member. I got really good at using my time well and I think it helped me to develop a resilience that has served me well in other positions...because it was really, really hard. I think those years were very important in helping me to become very good at staying focused.

In order to turn unexpected events into opportunities, the women in the study shared that they relied on other people who also believed in their success.

Surround Yourself with People Who Believe In You and People You Believe In

Throughout each of our interviews, women spoke about the important role of others in their personal and professional development. They identified key individuals who believed in and supported them from both personal and professional arenas, and how this developed into belief in themselves. Further, they also spoke about the importance of believing in the people with whom they worked most closely. For example, one woman shared:

My husband... is a true partner in every way. He shares in all the responsibilities.....He is an incredible support to me and has always been somebody who sort of pushes me to achieve.

Another woman commented about the importance of friends, stating:

I have a great cohort of women friends who I consider my mentors as well. They are people I can turn to that know all the words and are people I can talk to professionally. We talk about strategies for different things and challenging situations.

Beyond individuals who are currently in their lives, several participants discussed the importance of their parents or extended family. For example, one woman noted:

My mother had a strong influence; she insisted that my brothers and I had equal responsibilities with household chores. Also, as a teenager...my brother was treated...by a wonder woman MD, who also happened to be pregnant. My mom said, "Why don't you think about being a physician?" It never occurred to me that I couldn't do anything I wanted to do.

Many of the participants shared stories from their childhood about adults who left a lasting impression because of their belief in the participants' potential. For example, one woman remarked, "My first grade teacher was the first to appreciate my potential. She gave me encouragement and structure. I didn't come from a family of academics. The women stayed home."

Among all of the participants, finding supportive colleagues and friends was critical. For example, one woman who was a single parent commented:

The number of people that had helped me along, who babysat my kids, you would not believe. They were just wonderful. I didn't have family nearby, but I had a network of neighbors and friends...amazing people...who were so good to me. I think that creating that support system was really helpful. Asking for help became my area of excellence.

When reflecting on the importance of a colleague and mentor, another woman remarked:

When I went into [my field]...the chair of the department...helped me learn how to get into the residency program; helped me to learn how to stay on the faculty. How to write a paper. How to do a poster. He introduced me to people at national meetings...he is one of the best mentors that I've had and has helped me make an awful lot of decisions over time.

Ultimately, the vast majority of the women in the study shared in the sentiment that surrounding oneself with supportive friends, family, and colleagues is essential in career development and in becoming an effective leader.

Be Assertive in Your Communications and Actions

The women who participated in our study also often discussed the importance of speaking and acting assertively, whether this was in negotiating for resources or giving feedback to others. This development of communication skills was identified as critical for obtaining leadership positions. For example, in reflecting about how she learned to seek mentors at various points in her career, one woman shared:

I have been more pointed in looking for mentors... what exactly do I need help with now? Who do I know that might help me? And then not being embarrassed to ask for it...I'm not asking for the old traditional model of mentoring where you will be a lifetime guide for me to get to all realms but 'I need help doing X, Y, Z....' I try to approach it in a very professional way. Here is exactly what I'm asking for. Here is what I'll do and I try to be completely accountable.

Another commented about changes in her focus and assertiveness in making career decisions:

I have become much more thoughtful in my decision-making. My earlier mindset was that I had to say yes because opportunities were coming to me, instead of a mindset that I could make a plan and then look for opportunities that fit that plan. It's a whole different mindset.

There was little question that as leaders the participants learned to voice their opinions and ideas. In describing the need to do this one woman noted:

If you want to make a difference, you have to step up. Frequently I think women tend to be less vocal in a group situation than men....some of these meetings can be drowned out by the old boys club if the women don't speak up. I've been to some meetings [recently where] there were a couple women who...wouldn't say a thing. I pulled them aside at a break and said, 'Talk. Everything you say is fine! Talk! Because you will never get a chance again to get back into this community structure if you don't.'

Assertive communication was just one leadership skill among many that the women in the study felt they needed to hone in order to be effective.

Continually Refine Your Leadership Skills

Many of the women in our study also discussed a life-long learning approach to their own leadership development. This ranged from gaining important skills related to budget management and supervision of personnel to developing an authentic and collaborative leadership style. For example, participants shared the following examples:

It's not like I set out and said I want to be an administrator that deals with budgets and personnel. At the same time, I was looking for ways to improve my skill set so I looked for professional development opportunities in different areas. I spent all my life in education, as you would imagine, but also in leadership, just trying to develop skills for things that we didn't learn in medical school. I tried to

be very deliberate in looking for opportunities to participate in that would help develop my skill set.

I think there is great value in building consensus around a plan at any stage of leadership, because then you can use that plan to make difficult decisions. I think that sometimes women might have an advantage with that because I think we tend to listen well. I think we tend to communicate effectively and a lot of what I learned to do over the years is take what people share with me and write it in a way that is easy to digest and strategic and forward thinking.

Despite the fact that many of the women felt increasingly confident about their leadership abilities, many shared that it was still important to develop a thick skin.

Don't Take Things Personally

Many of the women in the study discussed their personal development in the ability to manage their emotional reactions and to not take things personally. Participants told very personal stories in this regard:

People can put extra pressure on their interpretation of your behaviors and can be very quick to use adjectives that none of us like....At the end of the day, I want people to like me but not at the expense of doing what is right. So I do work really hard on personal relationships because they are important to me, but that is not all that I base decisions on. I try to be fair and I try to be transparent...I would rather if somebody had a problem with me, they talk to me. I just try to lay that out there.

Even when not achieving the success for which they had hoped, the women felt it was important to manage their personal reactions. One participant shared:

Last year, I was candidate for [a leadership position] and not selected. This was a harder one, it felt more personal. Here's when I realized that everything would be fine: I went on an international trip with my family shortly after the search process. We went to a very crowded place. I realized that no one there knew or cared anything about [my job or institution]. It put my life in perspective of the world.

Another shared the struggle of trying not to take things personally and how this might be more difficult for female than male leaders:

As a new chair, I would meet with certain sections and just feel like I needed to have brought my bullet-proof vest... I started becoming good friends with male chairs around the country. When you get to know them and you start going out to dinner with them in an informal environment, you find that they have exactly the same feelings and the same challenges but they are better at not wearing it home and staying up all night. I found that I wasn't alone. I also read a lot of books and went to every session I could find at meetings about dealing with the emotional side. It has been getting more comfortable and I am much better at this now than I was before.

Other women reflected on the importance of balance and outside activities to provide distance and not make everything personal:

You put one foot in front of the other and do as much as you can and then turn off the light and close the door and go home and come back the next day. Sometimes I'm on email late at night or something but for the most part, I try not to take it home. I have outside interests...that seem to help my disposition a great deal....So you find other outlets and venues and things that you are interested in doing in your life and exploring relationships and whatnot. Live your life.

In addition to managing their emotions, many participants found it was important to have a system for managing time and tasks.

Stay Organized

The women we interviewed spoke at great length about goal setting, time management, organization, and delegating to others as critical for achieving their career goals. For example, one participant remarked:

I can't be at three places at once....So I'm a good delegator and have developed my administrative skills so I can actually have enough people around me that are doing the work. I meet with them regularly and kind of move things along that way. I have to do that.

In addition to maintaining a system for delegating and organizing, one participant mentioned the importance of attending to the task at hand:

Focus, focus, focus. When I'm doing [a procedure], I'm doing that [procedure]. I do rely on people to assist me and remind me; some things have changed. But the main thing is the focus.

Many participants remarked on the importance of building a strong team in support of their goals. For example:

I have three research coordinators that are amazing and that make the research happen. I can't give them enough credit because they make the research happen. I can think of the idea. I can do the networking all over the country with people I meet. I can get into studies but the actual nitty gritty, getting things done, they do with my help and supervision. That is a big, big argument for delegating.

While delegating proved to be an important strategy, many participants remarked that this approach was possible only because they paid close attention to their relationships with others.

Build Positive Relationships and Welcoming Environments

The women in our study also discussed their positive attitude and respectful approach to dealing with others. Many of our participants used their relationship-building abilities to their advantage. For example:

I have the optimism gene. My attitude is we're all people and so I'm going to do what I can to pull my weight and I'll help you and you help me and we do that no matter what any of our external appearances are. I think that having that kind of attitude has made it possible for me to get along with people.

The importance of being respectful of others even in moments of disagreement was mentioned by more than one participant. As a participant explained:

I just believe if I give you respect, you have to give respect back to me. When I have an opinion and something to share, I'm not a person who believes in screaming or having a tantrum. I just speak quietly. My big stick is my mind. You cannot influence my mind. You have to know who you are and be true to yourself. That has always served me.

An attitude of respect and collegiality was a useful tactic when the participants encountered barriers.

When And If Necessary, Prove Them Wrong

Not surprisingly, many of the participants told stories where they had to overcome negative messages about their career choices. Rather than letting these obstacles become major setbacks, however, many of the women set out to show that they could be successful. For example, one participant explained:

[A senior colleague] told me that I would never have an academic career because I wanted to work part time...finally...I said, well I'm not going to let this guy do that. So I just started looking for opportunities. It just was very clear to me that I was going to have to make my own way if I wanted to be successful.

Similarly, one participant shared:

In high school when I told my advisor that I wanted to go into medicine, I was steered to something else so I went around that little rock and I found another counsellor who got me into the program that allowed me to do the career sample. She took me seriously.

And lastly, one woman explained:

My 6th grade teacher one day was talking about career opportunities, and said to me that I might want to become a doctor. But the script from my Grandmother was "marry, have kids, make toast in the morning." One Christmas I asked for a microscope. Grandma was mad at my parents for buying one for me. I overheard their argument while looking for specimens. But I didn't buy her script.

In summary, nine themes emerged from the participant interviews, including: (1) hold fast to your values; (2) be open to unexpected opportunities; (3) surround yourself with people who believe in you and people you believe in; (4) be assertive in your communications and actions; (5) continually refine your leadership skills; (6) don't take things personally; (7) stay organized; (8) build positive relationships and welcoming environments; and (9) when and if necessary, prove them wrong. These themes offer a powerful lens through which to examine the development of women leaders in academic medicine.

Discussion

Previous research has shown that career paths differ between men and women in academic medicine. For example, White, McDade, Yamagata, and Morahan (2012) recently studied gender-related differences in the pathway to deanship among 534 deans appointed between 1980 and 2006 (38 of whom were women). They found that women took longer on average than men to advance through the ranks from assistant to full professor, served shorter terms as dean, and that women deans were more likely to graduate from and serve as dean at less research-intensive institutions. The finding that women tend to advance through the ranks more slowly than men is not new (i.e., Ash, Carr, Goldstein & Friedman, 2004; Wright et. al., 2003); however, less is known about the lived experiences of those women who do achieve positions of senior leadership, regardless of the length of time it took them. Fewer studies capture the qualitative experiences of women in leadership in academic medicine or more broadly across higher education, with some notable exceptions. Pololi's (2010) book, for example, captures the perspectives of women faculty in academic medicine based on two qualitative studies during which she and her research team interviewed 116 faculty members of various ranks across five medical schools (55% of whom were women). She notes,

Little has been written about values, power, and relationships in medical schools. There is modest literature about medical school faculty per se, but women's experience in particular has largely been left out of the conversation...their perspective...in many respects is that of an outsider. (p. 11-12)

Some of the success strategies that the women in her studies described include "creating microenvironments," that is, collaborative and trusting work groups and focusing on the increased opportunities to be of service to others. Many of the women interviewed by Pololi described the ability to bring new perspectives to policies, practices, and decision-making as far more important than leadership simply for the sake of being in charge. While some of the themes from Pololi's work are similar to those that emerged in our study, ours offers new insights. Because our study focused on women in academic medicine currently holding leadership positions, we add to the understanding of those who have successfully navigated the complex and competitive environment of an academic medical center.

There are a few qualitative studies designed to understand the experiences of women in other sectors of higher education. For example, Philipsen (2008) conducted 46 interviews with women faculty members across all phases of the faculty life cycle. This research generated a number of recommendations for success in higher education, such as learning to say no, finding a mentor, maintaining a sharp focus on one's goals, developing a well-connected network, and cultivating both personal and work relationships. In a book based on interviews with African American women faculty, Cooper (2006) emphasized the necessity of feeling deeply passionate about

one's work, stating: "a passion-based philosophical framework does more than drive your tenure activities. It can also serve as the foundation or a successful career. When your ideas and scholarship are challenged, simply refer back to your framework and refocus" (p. 120-121). This advice resonates with the theme from our study about holding fast to one's values. Many of our interviewees based their career and life choices on what mattered most to them, thus using their values like a compass to guide them throughout their personal and professional journeys.

Similarly, Madsen (2008) interviewed ten current or recently retired women presidents or chancellors of universities about their lives and the influences of their experiences on their careers. Some of the themes and observations in this book are similar to the themes in our study. For example, the majority of the presidents described their parents and other influential individuals who, throughout their lives, mentored them and provided both support and challenges for growth. Additionally, the women presidents described the importance of relationships and trust for effective leadership. Moreover, Madsen (2008) wrote that one takeaway from her interviews is that:

Women academic leaders do not always intentionally look for leadership positions, but instead work hard and perform to the best of their abilities in their current posts. They are often offered added responsibilities and new positions and are also encouraged by others to apply for and accept new opportunities. (p. 152)

This is similar to the theme from our interviews of being open to unexpected opportunities and, with mentoring regarding strategic risk taking, being flexible enough to take advantage of them. Again, while some themes from these studies relate to what we learned in this study, in comparison to other sectors of higher education, academic medical centers have a unique organizational structure and business model due to the clinical enterprise. Thus, our focus on women in academic medicine adds to the literature base about women in leadership by filling this gap.

Limitations

One major limitation of our study is that all interview participants were drawn from the same academic institution. Women may share some common experiences by working at the same institution, and a multi-institutional sample may yield different results. However, the institution from which the participants were drawn is one of the largest of its kind in the country, and thus likely to be more diverse. An additional limitation is that the interviews were conducted in front of an audience. While this was because the interviews were intended to serve the dual purpose of our research study and as a learning opportunity for the audience, the potential exists that the participants may have censored themselves to some degree for the purpose of impression management.

Conclusion

Throughout her book, Madsen (2008) commented about the powerful role of self-reflection in the lives of the women university presidents that she interviewed, a skill which they developed early in life and practiced routinely throughout their development. Examples of quotes from her participants include, 'reflection has been an absolute lifesaver' and 'reflection can be the most enriching experience if you are willing to deeply acknowledge your own frailties...' (p. 11). Similarly, we have been struck by the self-reflective capabilities of the women we interviewed and the role of selfreflection as a component of leadership development and effectiveness. We believe that discussing life lessons of successful women is important to empower women to create and embrace their own career paths. By developing a deeper understanding of the unexpected yet authentic career paths of women in leadership positions in academic medicine, we hope to encourage and empower more women to climb the leadership ladder.

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