Knowledge and Perceptions of Family Leave Policies Among Female Faculty in Academic Medicine

Christine M. Gunn, MA,
Boston University School of Medicine, Women's Health Unit, Department of Medicine, 801 Massachusetts Avenue, First Floor, Boston, MA 02118, cgunn@bu.edu, Phone: (617) 638-8036, Fax: (617) 638-8096

Karen M. Freund, MD, MPH,
Institute for Clinical Research and Health, Policy Studies, Tufts Medical Center, 800 Washington Street #63, Boston, MA 02111, kfreund@tuftsmedicalcenter.org, Phone: (617) 636-5065

Samantha A. Kaplan, MD, MPH,
Assistant Professor of Obstetrics and Gynecology, Boston University School of Medicine, 715 Albany Street, A205, Boston, MA 02118, sakaplan@bu.edu, Phone: (617) 414-5785, Fax: (617) 638-4433

Anita Raj, PhD, and
Professor in the Division of Global Public Health, Department of Medicine, University California San Diego, 10111 N. Torrey Pines Rd., La Jolla, CA 92093, anitaraj@ucsd.edu, Phone: (858) 822-6468

Phyllis L. Carr, MD, FACP
Professor of Medicine, Massachusetts General Hospital, 55 Fruit Street, Boston, MA 02114, pcarr1@Partners.org

Abstract

Objective—The purpose of this research was to examine the knowledge and perceptions of family leave policies and practices among senior leaders including American Association of Medical College members of the Group on Women in Medicine and Science (GWIMS) to identify perceived barriers to career success and satisfaction among female faculty.

Methods—In 2011–2012 GWIMS representatives and senior leaders at 24 medical schools were invited to participate in an interview about faculty perceptions of gender equity and overall institutional climate. An inductive thematic analysis of the qualitative data was conducted to identify themes represented in participant responses. The research team read and reviewed institutional family leave policies for concordance with key informant descriptions.

Findings—22 GWIMS representatives and senior leaders comprised the final sample. Participants were female, 18 (82%) were full professors with the remainder being associate professors. Compared with publicly available policies at each institution, the knowledge of nine participants was consistent with policies, was discrepant for six, with the remaining seven acknowledging a lack of knowledge of policies. Four major themes were identified from the interview data: 1) *Framing family leave as a personal issue undermines its effect on female faculty success*; 2) *Poor communication of policies impairs access and affects organizational climate*; 3) *Discrepancies in leave implementation disadvantage certain faculty in terms of time and pay*; 4) *Leave policies are valued and directly related to academic productivity*.

Conclusions—Family leave policies are an important aspect of faculty satisfaction and academic success, yet policy awareness by senior leaders is lacking. Further organizational support is needed to promote equitable policy creation and implementation to support women in medical academia.

Introduction and Background

Women remain under-represented in senior medical faculty positions, despite an increase in women entering medical school. The Association of American Medical Colleges (AAMC) reported in 2012 that women represented 37% of medical school faculty, up from 29% in 2001 (AAMC, 2011). However, only 13% of women hold the rank of full professor, compared with 30% of men (AAMC, 2011). The underrepresentation of women at senior ranks is likely multi-factorial (Bickel, 2000a), but one contribution to the lack of parity is the poor retention of women in academic careers (AAMC, 2008; Shroen, 2004). A 2008 report quantifies these differential rates of attrition by gender: 9.1% of women left academic medical positions, compared to 7.7% of men (Cropsey, Masho, Shiang, Sikka V et al., 2008). An AAMC report indicates that while attrition rates among medical school faculty are stable over time, in a 10 year period 44% of women left academic medicine compared to 38% of men (AAMC, 2008).

Several studies describe the reasons that women leave academic medicine. Institutional factors include organizational climate, limited career flexibility and incompatibility of goals for work-life balance (McGuire, Bergen, & Polan, 2004; Shollen, Bland, Finstad, & Taylor, 2009). Both men and women express tensions in balancing family life with an academic medical career, but women are perceived to be disproportionately affected by child and dependent care responsibilities. This adversely impacts their career success and satisfaction in comparison with male faculty and female faculty without children (Carr et al., 1998).

National policies such as the Family and Medical Leave Act of 1993 provide a standard for employers regarding flexibility for the care of family members and children. In medicine, accreditation standards require medical schools to distribute written benefits and policies to faculty (LCME, 2012). Research conducted at individual institutions has demonstrated, however, that current policies are not meeting the needs of faculty and act as a barrier to recruitment and retention of female academics (Levine, Lin, Kern, Wright, & Carrese, 2011; Osborn, Ernster, & Martin, 1992). Transforming policies and practices will potentially reduce attrition rates of females from academic positions and improve gender diversity at all

ranks. The AAMC's Group on Women in Medicine and Science (GWIMS) is an initiative created to address disparities in advancement and promotion by improving recruitment, retention, recognition, and career advancement of women faculty through gender equity advocacy (AAMC., 2013). Each AAMC member institution designates one or more GWIMS representatives to fulfill this role and liaise with the national group.

Policy awareness has been a key issue in whether women take advantage of policies meant to provide work-life balance and whether they feel supported by senior leaders and their institution in doing so (Willett et al., 2010). Extending the length of family leave without also changing academic norms within institutions may still pose barriers for women in achieving the desired mix of family and work involvement (Williams, 2000). Counseling junior faculty regarding family leave policies may be key role of mentorship, yet little is known about senior female faculty's knowledge and perceptions of family leave policies in academic medicine. One study among academics in the social science disciplines has suggested that a lack of awareness among senior administrators results in women seeking leave feeling frustrated and unsupported (Stout, Staiger, & Jennings, 2007). We therefore conducted a qualitative study to describe the knowledge and perceptions of family leave policies and practices among a sample of AAMC GWIMS representatives and senior leaders to identify barriers to female faculty career success and satisfaction.

Methods

Data collected for this study comprise part of a mixed methods longitudinal study of faculty climate across medical schools in the US. Purposefully selected schools include public and private institutions from all four AAMC geographic regions (Carr et al., 1998). In 2011–2012 key informants from 24 medical schools were invited to participate in a qualitative, semi-structured interview about faculty perceptions of gender equity and overall institutional climate. This paper analyzes interview data from AAMC GWIMS representatives and senior faculty leaders focusing on the topics of institutional policies relating to family leave.

The AAMC publishes a list of institutional representatives from the Group on Women in Medicine and Science. The listed GWIMS representatives at each participating medical school were contacted via email and invited to participate in the qualitative interview. We used a purposive sampling technique in selecting GWIMS representatives as key informants due to their designated role related to women's advancement at their respective institutions. If a GWIMS representative was unavailable or refused participation, the researchers elicited a recommendation for another senior administrative leader who could speak to the gender climate at the institution. Senior leaders were comprised of department chairs, deans, and directors primarily related to faculty affairs, faculty development and/or diversity. We collected published policies from informants and/or public websites for family leave, harassment, and discrimination for each institution in addition to interview data.

Four research team members conducted telephone interviews that lasted between 20 and 81 minutes (mean= 51 minutes). Interviewers obtained informed consent prior to interviews, which were audio-taped and transcribed. Participants were awarded a modest monetary incentive for participation. Questions regarding family leave included: "What are your

institution's policies on family and maternity leave?" and "Describe the adequacy of policies in meeting faculty needs."

Analysis of the interview data was conducted in two phases. The interviews covered a variety of topics related to the gender climate. We first used an *a priori* coding scheme based on the interview guide to separate responses into content areas. Two researchers then used the data coded under "Policies," "Changes in Policies," and "Family and Maternity Leave" to conduct an inductive thematic analysis, identifying themes represented in participant responses (Braun & Clarke, 2006). Themes that were expressed by multiple informants were studied for patterns of association and grouped into broader categories using HyperRESEARCH v. 3.0. The final themes detailed below describe associations between policies and academic success.

Two coders evaluated institutional policies for concordance with key informant descriptions. We anticipated that GWIMS representatives and identified senior leaders would be well-versed in the policies at their institutions. Participant statements were categorized as consistent with policies, discrepant, or the key informant reported that they did not know the policy. Affiliated institutional policies such as teaching hospitals employing clinical faculty were not reviewed. Coders presented findings to the larger research group for discussion and consensus building. Inter-coder agreement was reached using a standard approach described by Carey et al. (Carey, 1996). This study was approved by the Institutional Review Boards at Boston University Medical Center and Tufts Medical Center.

Results

Twenty four GWIMS representatives or senior leaders were identified and offered participation in qualitative interviews. Twenty-two provided consent and comprised the final sample. The 22 participants represented schools from all 4 AAMC regions: South (n=4); Northeast (n=10); Central (n=4); and West (n=4). Ten of the schools represented were private institutions and 12 were public. Six institutions had less than 600 students enrolled in 2012, 10 had 601-800, and 6 had more than 800 students enrolled.

All 22 key informants were female, and 18 (82%) held the rank of professor with the remainder being associate professors. Eighty-two percent of the sample identified as Caucasian, 9% African American, and 9% Asian. The mean age of the participants was 58 years, with an average of 19.3 years spent at the current institution. Fourteen of the participants were designated GWIMS representatives, while the other 8 held leadership positions related to gender advocacy. Eight participants held a department chair position; 17 were assistant/associate deans; and 5 explicitly described their active role in the promotion and tenure committee at their institution.

Policy Awareness

While we anticipated that GWIMS representatives and senior leaders would be well-versed in family leave policies at their institutions, of the 22 interviewed, 9 correctly knew the policies, 7 were unsure of the policies, and 6 incorrectly stated the policies at their institution. For example, one participant categorized as discrepant indicated "We still do not

have a formal pregnancy leave policy," while the written policy stated the institution "allow[s] up to 12 weeks of unpaid leave in a rolling 12-month period for one or more of the following reasons: the birth and care of an employee's newborn child; the placement of an adopted son or daughter."

Perceptions of Existing Policies

Four major themes were identified through inductive thematic analysis. Each theme is further described below.

Framing Family Leave as a Personal Issue Undermines its Effect on Female Faculty Success—Key informants described family leave policies as affecting individuals, rather than groups; with a disproportionate effect on women. Language used in describing policies reflected the idea that leave is a matter of personal concern: "I did have a child while I was here. It seemed to be okay for me. Some people may need more" (Full Professor, Department chair, 23 years at institution). The same individual further described the situation regarding the personal nature of the policies explicitly: "But as I said, my feeling is that… it's really more an individual thing than an institutional value." Such descriptions were associated with less clearly defined institutional policies. Where policies were more standardized and inclusive, leave issues were discussed as being related to broader gender issues. One informant described how her institution adopted policies that explicitly attempted to provide greater support for women with families to reduce the disparities in promotion and tenure between male and female faculty:

> "We needed to provide greater opportunities for people to be successful in promotion and tenure, particularly people with family obligations. And we did succeed in modifying the bylaws to extend the time to tenure and to have a stop the clock mechanism. We need to increase diversity among our faculty, and that continues to be a challenge for us. We need, we have gender diversity in the assistant professor ranks, but promotion comes more slowly to women, although I'm fully satisfied that that's not at the decision-making committee level, it's at the, how do we support people so that they can be productive and take care of their kids and their mothers kind of level."
>
> (Full professor, Associate dean, 20 years at institution)

Institutional recognition of leave as a gender issue related to tenure and/or promotion was associated with more inclusive and standardized protocols that addressed the underlying inequality in promotion and tenure.

Poor Communication Policies Impairs Access and Affects Organizational Climate—Key informants frequently perceived difficulties in locating university family leave policies. Lack of institutional transparency was a critical issue in the dissemination of formal leave policies to faculty:

> "I think the biggest barrier is that women may not know about them… I don't think there's any particular disparity in terms of whether or not they're granted."
>
> (Full Professor, Senior associate dean, 37 years at institution)

The lack of awareness was cited as a barrier for faculty in realizing the benefits of existing policies. A second variation on this theme was concern that poor access or use of policies was related to organizational climate:

> "One [policy] is that we have had for a long time, and I can't remember the start date, the ability for women to be able to stop the tenure clock after having a child. And what we found is that a lot of women didn't use it, so it was as if there was a stigma for using it, even though it was available, which points to the culture, as opposed to the reality."

> (Full professor, Department chair, 24 years at institution)

The importance of communication was related to knowledge of existing benefits to faculty as well as dispelling perceptions that using leave time or stop the clock policies would be negatively viewed by superiors. Policies created with the intention of supporting female faculty were underutilized because of little transparency around both actual policies and their intended use by institutions.

Discrepancies in Leave Implementation Disadvantage Certain Faculty in Terms of Time and Pay—The most common concern mentioned by participants was inconsistency within institutions in the application of family leave. Inconsistency was described as related to two practices: 1) Individual negotiation around leave terms; and 2) Perceived discrepancies in leave time and pay between departments, practice plans, and clinical/non-clinical faculty.

Participants indicated that FMLA laws have added structure to family leave policies, but faculty still described the application of leave as problematic:

> "I think there are some real problems with it. I mean, I don't think everybody should have to negotiate their own maternity leave, and we've been working on that issue. Well, it used to be abysmal, because everybody had to kind of work it out on their own. I think it's gotten better, but it's not what it needs to be."

> (Full professor, Associate dean, 21 years at institution)

This key informant describes the unsatisfactory nature of her institution's practices regarding the individual negotiation of leave. It was recognized by many senior leaders that the negotiated element of family leave resulted in individual variation that disadvantaged some female faculty. *While some faculty were able to "work out a good deal" (Full professor, 21 years at institution), others were not able to negotiate the full 12 week leave period or a stop on their tenure clock. Key informants perceived that negotiation lead to disparities in faculty productivity and work-life balance. Negotiation was particularly concerning when negotiated leave terms were at odds with academic policies.*

A second issue raised by this sample was the complicated nature of policies as applied to clinical and non-clinical faculty. One informant described the situation stating, "There probably would be as many policies as there are affiliated hospitals" (Full Professor, Assistant dean, 30 years at institution). *Key informants described the potential for encountering conflicting policies for faculty who hold multiple appointments and*

affiliations, a common trend among medical school faculty. There were several descriptions of these conflicts by the key informants, suggesting that these complexities were perceived to pose difficulties for faculty with a primarily clinical appointment. For example,

> "The practice groups pay a big chunk of the clinical faculty…some practice groups may pay somebody their full salary while they're out, or their piece of salary… and others may not at all."

(Full Professor, Senior associate dean, 18 years at institution)

> "We are a medical school within a university. So the university allows a 12 week maternity leave. And we are allowed a six week maternity leave. And so you have two different things because of the way the academic system works."

(Associate Professor, Associate dean, 1 year at institution)

It was consistently expressed among participants that policies disadvantaged clinical faculty compared to non-clinical faculty, especially regarding time and pay. One participant summarized the effect on clinical faculty as follows:

> "Well, they're inadequate in that they really pertain to the tenure clock. And so there's no-- Essentially it's up to the individual woman to negotiate with her supervisor. You know, "I'm taking this amount of time off for a child," or say, she wants to go parttime/ half-time, even. Her salary will, of course, be cut in half for that. And the way it stands now, if she's a clinician, she still has to pay 100% of her malpractice. So basically that means the amount of money she's able to make can be really substantially reduced. By that, I mean she would have more expenses relative to how much money she's making."

(Full professor, Senior associate dean, 37 years at institution)

Variation in policies between individuals and groups were described as creating financial imbalances, which was particularly true for clinician relative to non-clinician appointments.

Leave Policies are Valued and Directly Related to Academic Productivity—
Many participants who had long tenures at their institutions expressed positive changes in leave policies over time. Several participants, however, described the continued importance of developing policies that support the advancement of faculty who may have families:

> "We felt that everybody should have an extended time to tenure… because it's getting harder to get funding, it's getting harder to get a grant renewed, and in order for the promotions committee to make good decisions for the institution, more time only helps all of us. It helps the faculty member be successful and it helps the institution choose the right people to tenure."

(Full Professor, Associate dean, 20 years at institution)

> "The policies I think, need to be made so that… delayed tenure clocks is mandatory if you have a child or adopted child, so that it's an opt-out rather than an opt-in. Otherwise, there's always going to be a concern with women, or men, if they select this that they're going to be viewed as a second-class faculty person. And I do think

also that the policies for part-time faculty need to be broadened as much as possible to retain faculty part-time. Because I see this as an increasing lifestyle among faculty."

(Full Professor, Department chair, 29 years at institution)

Inclusion of these policies was perceived to support faculty success and institutional sustainability. The above examples imply an underlying theme where better policies will lead to more success for all types of faculty, but only if supported and promoted by the institution.

Conclusions and Discussion

We interviewed GWIMS representatives and senior leaders at 22 institutions, choosing this group for their advocacy role in women's advancement in academic medicine at their institution, and in part through the AAMC. We discovered that most participants did not know, or incorrectly stated, the policies available to faculty. As GWIMS representatives and/or identified advocates for gender equity, we expected that these women might have a role in both shaping policy and/or mentoring junior faculty on these issues. The lack of awareness has several implications for junior faculty at these institutions. Many of these key informants were involved in the promotion and tenure committees, yet had little understanding of the policies that are meant to support junior faculty through this process. Research among other academics has demonstrated that junior faculty experience profound frustration and feel unsupported when administrators do not understand the family leave policies (Stout et al., 2007). As senior leaders, these individuals contribute to the organizational climate related to family leave and their lack of awareness may be seen as a barrier to success for some junior faculty.

Key informants perceived that family leave policies were related to women's ability to advance and obtain tenure, their ability to receive equitable compensation, and the overall organizational climate. Organizational values are represented by senior leaders. Values such as institutional support and low commitment to faculty have been associated with faculty dissatisfaction and attrition (Pololi, Krupat, Civian, Ash, & Brennan, 2012). Other literature indicates that women place high value in informational and relational justice within the workplace (Jepsen & Rodwell, 2009). These senior leaders similarly express a desire for more uniform and transparent policies. However, with little knowledge of actual policies, concrete actions to promote change are lacking. This could be due to the devaluation of the female perspective in academics and/or the lack of resources available to enact change (Stout et al., 2007). Many of these women had role designations that were either insufficiently funded or received no funding at all for their efforts. Increasing institutional support may require financial resources to support senior leaders to carry out desired policy communication and effect organizational change.

Our findings suggesting that senior medical school faculty perceive barriers to advancement associated with family leave policies are supported by other research on work-life balance. Competing demands of work and home life have been previously documented to be particularly challenging for clinical faculty (Levine et al., 2011) and have been cited as a

factor related to poor career satisfaction (Rizvi, Raymer, Kunik, & Fisher, 2012), lack of mentoring and role models (Levine et al., 2011), and comparatively less academic productivity (Schrager, Bouwkamp, & Mundt, 2011) among female faculty. Participants in our study also expressed concern regarding the perceived discrepancies in leave compensation and time granted between departments, particularly between non-clinical and clinical domains. Other research has confirmed that over time, female academic faculty have lower pay and cite poor compensation and lack of professional advancement as a reason for leaving an institution (Cropsey, Masho, Shiang, Sikka et al., 2008). These perceived inequities in pay between individuals related to family leave were described as impactful, particularly for clinical faculty.

There remains significant variation in policies across medical schools despite the enactment of the federal FMLA law in 1993 (Bickel, 2000b). Our findings suggest that policies are perceived to vary within institutions as well. Creating and widely disseminating faculty-friendly policies may increase both satisfaction (Rizvi et al., 2012) and retention in medical academia (Howell, Beckett, Nettiksimmons, & Villablanca, 2012). It may also aid individuals in overcoming barriers to advancement and promotion resulting from familial demands (Krener, 1994; Silver, 1995). Senior leaders and GWIMS representatives are situated to be champions for improved communication and policies. However, without organizational supports, both financial and material, female faculty may continue to be disadvantaged in terms of advancement. Additional resources such as onsite childcare, longer leave periods, flexible work schedules, mandated tenure clock stoppages, and paid leave can support women to attain career goals and in doing so improve work-life balance for all faculty (Rizvi et al., 2012; Villablanca, Beckett, Nettiksimmons, & Howell, 2011). Aligning policies and programs with faculty goals and values is an important step forward in creating a successful and diverse workforce in academic medicine.

Limitations of the research include that these senior leaders may have had limited awareness of family leave issues given their relative older age and senior faculty level. The perceptions of senior leadership may not reflect the breadth of opinions among the entire faculty. We chose these key informants because of their AAMC leadership role in advocating for women faculty and the established influence of senior faculty on the work-life culture in academia (Fothergill & Feltey, 2003). Future studies should incorporate the perspectives of junior faculty who are more immediately affected by such issues. Increasing institutional efforts to disseminate policies to senior faculty and GWIMS may support junior faculty in the implementation of policies. The qualitative nature of this study aims to explore the variation in perceptions and knowledge among senior female faculty and is not meant to be generalizable to all US medical schools. This is one of a very few studies that sampled from a geographically diverse set of US medical schools balanced for public and private status, which provides some credibility to these themes across different institution types.

Implications for Policy and/or Practice

The low levels of expressed awareness of family leave policies among senior faculty in this study and concerns regarding dissemination are consistent with other studies in academic medicine and science (Villablanca et al., 2011). Professional organizations can provide

support for these senior faculty members to initiate organizational change around family leave policies. Accreditation bodies and professional organizations have had limited success in promoting gender equity at the faculty level through policy change (LCME, 2012). This limited role of LCME in creating family leave policy could be expanded to achieve more consistent and transparent policies across all US medical schools. Incorporating standards for leave policy implementation and dissemination as a component of accreditation may increase the awareness of work-life balance as a barrier to advancement and promotion and aid in increasing diversity among medical school faculty at all ranks.

This study provides valuable information on the perceptions and awareness of senior medical school faculty about family leave policies. The multi-site nature of this study has demonstrated that there are common issues across institutions regarding policies. In sum, family leave policies are perceived by senior leaders to impact faculty advancement, compensation and satisfaction. Despite the importance of such policies, this sample of female faculty had little awareness of policy parameters and perceived policies to be poorly disseminated. Further efforts to enhance organizational support for equitable policies that affect advancement are needed to increase satisfaction among faculty so that a robust workforce is maintained to serve the diverse needs of the US population.

Acknowledgments

References

AAMC. The long-term retention and attrition of U.S. medical school faculty. 2008. Retrieved. from https://www.aamc.org/download/67968/data/aibvol8no4.pdf.

AAMC. Women in U.S. Academic Medicine: Statistics and Benchmarking Report, 2009–2010. 2011.

AAMC. Association of American Medical Colleges: Group on Women in Medicine and Science (GWIMS). 2013. Retrieved February 4, 2013, 2013, from https://www.aamc.org/members/gwims/

Bickel J. Women in academic medicine. J Am Med Women's Assoc. 2000a; 55(1):10–12. [PubMed: 10680399]

Bickel, J. Women in Medicine: Getting in, Growing, and Advancing. Thousand Oaks, CA: Sage Publications; 2000b.

Braun V, Clarke V. Using thematic analysis in psychology. Qualitative Research in Psychology. 2006; 3:77–101.

Carey J, Morgan M, Oxtoby MJ. Intercoder agreement in analysis of responses to open-ended interview questions: examples from tuberculosis research. Cultural Anthropology Methods. 1996; 8(3):1–5.

Carr PL, Ash AS, Friedman RH, Scaramucci A, Barnett RC, Szalacha L, et al. Relation of family responsibilities and gender to the productivity and career satisfaction of medical faculty. Annals of Internal Medicine. 1998; 129(7):532–538. [PubMed: 9758572]

Cropsey K, Masho S, Shiang R, Sikka V, Kornstein S, Hampton C, et al. Why Do Faculty Leave? Reasons for Attrition of Women and Minority Faculty from a Medical School: Four Year Results. Journal of Women's Health. 2008; 17(7):1111–1118.

Fothergill A, Feltey K. "I've Worked Very Hard and Slept Very Little": Mothers on the Tenure Track in Academia. Journal of the Association for Research and Mothering. 2003; 5(2):7–19.

Howell LP, Beckett LA, Nettiksimmons J, Villablanca AC. Generational and Gender Perspectives on Career Flexibility: Ensuring the Faculty Workforce of the Future. The American Journal of Medicine. 2012; 125(7):719–728. [PubMed: 22727238]

Jepsen D, Rodwell J. Justice in the workplace: the centrality of social versus judgmental predictors of performance varies by gender. The International Journal of Human Resource Management. 2009; 20(10):2066–2083.

Krener P. Gender differences in career paths in psychiatry. Academic Psychiatry. 1994; 18:1–21. [PubMed: 24435498]

LCME. Functions and Structure of a Medical School: Standards for Accreditation of Medical Education Programs Leading to the M.D. Degree. 2012.

Levine RB, Lin F, Kern DE, Wright SM, Carrese J. Stories from early-career women physicians who have left academic medicine: a qualitative study at a single institution. Academic Medicine. 2011; 86(6):752–758. [PubMed: 21512363]

McGuire LK, Bergen MR, Polan ML. Career advancement for women faculty in a U.S. school of medicine: perceived needs. Academic Medicine. 2004; 79(4):319–325. [PubMed: 15044163]

Osborn EH, Ernster VL, Martin JB. Women's attitudes toward careers in academic medicine at the University of California, San Francisco. Academic Medicine. 1992; 67(1):59–62. [PubMed: 1729997]

Pololi L, Krupat E, Civian J, Ash A, Brennan E. Why Are a Quarter of Faculty Considering Leaving Academic Medicine? A Study of Their Perceptions of Institutional Culture and Intentions to Leave at 26 Representative U.S. Medical School. Academic Medicine. 2012; 87(7):859–869. [PubMed: 22622213]

Rizvi R, Raymer L, Kunik M, Fisher J. Facets of Career Satisfaction for Women Physicians in the United States: A Systematic Review. Women & Health. 2012; 52(4):403–421. [PubMed: 22591235]

Schrager S, Bouwkamp C, Mundt M. Gender and first authorship of papers in family medicine journals 2006–2008. Family Med. 2011; 43(3):155–159.

Shollen SL, Bland CJ, Finstad DA, Taylor AL. Organizational Climate and Family Life: How These Factors Affect the Status of Women Faculty at One Medical School. Academic Medicine. 2009; 84(1):87–94. [PubMed: 19116483]

Shroen A, Brownstein MR, Sheldon GF. Women in academic general surgery. Academic Medicine. 2004; 79:310–318. [PubMed: 15044162]

Silver M. Women in administrative psychiatry. Annals of Psychiatry. 1995; 25:509–511.

Stout P, Staiger J, Jennings N. Affective stories: Understanding the lack of progress of women faculty. NWSA Journal. 2007; 19(3):124–144.

Villablanca AC, Beckett L, Nettiksimmons J, Howell LP. Career Flexibility and Family-Friendly Policies: An NIH-Funded Study to Enhance Women's Careers in Biomedical Sciences. Journal of Women's Health. 2011; 20(10):1485–1496.

Willett LL, Wellons MF, Hartig JR, Roenigk L, Panda M, Dearinger AT, et al. Do Women Residents Delay Childbearing Due to Perceived Career Threats? Academic Medicine. 2010; 85(4):640–646. [PubMed: 20354380]

Williams, J. Unbending Gender: Why Family and Work Conflict and What to Do About It. New York, NY: Oxford University Press; 2000.